

**SELLING PERSONAL COMPUTER SOFTWARE
TO CORPORATE AMERICA**

INPUT

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Clients receive reports, presentations, access to data on which analyses are based, and continuous consulting.

Many of INPUT's professional staff members have nearly 20 years' experience in their areas of specialization. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

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ABSTRACT

The Fortune 1000 marketplace for microcomputer software is large, growing, and hotly contested. This market will grow at a rate of 26% a year, from \$260 million in 1985 to \$1.1 billion in 1990. Success in this marketplace can be critical to success in the overall market, for large corporations, with their volume purchases, not only significantly impact the bottom line of vendors, but influence the buying patterns of smaller businesses as well.

The trend toward centralized purchasing in large corporations will serve as a lever to hasten several trends in the software industry: more site licensing, more use of direct sales forces, increased standardization, removal of copy protection, and improved training and support.

The purpose of the report is to help software vendors establish realistic market plans and pricing strategies that take advantage of profit and growth opportunities. The report includes market forecasts, an analysis of current vendor strategies, an analysis of how products are selected and purchased, and an analysis of site licensing policies. Also included are recommendations for innovative and effective marketing and distribution strategies.

This report contains 153 pages, including 57 exhibits.



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SELLING PERSONAL COMPUTER SOFTWARE TO CORPORATE AMERICA

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I INTRODUCTION

I INTRODUCTION

A. REPORT SCOPE AND OBJECTIVES

- This study was produced by INPUT as part of the Personal Computer Software program in the 1985 Market Analysis and Planning Service (MAPS) for the information services industry.
- INPUT's objective is to analyze current market conditions and vendor activities in order to identify key issues and trends that require vendor action. Specific recommendations are included in this report to provide vendors with a framework for further analysis and investigation.
- This area of research was selected because of high client interest. Strategies for selling personal computer software into the Fortune 1000 is a very timely subject in today's slumping computer marketplace because the Fortune 1000 have the resources that enable them to continue to buy large quantities of computers while the other segments of the market delay or postpone their purchases indefinitely.
- In the Fortune 1000 there is a changing market focus from the individual buying to centralized corporate purchasing plans. This report offers vendors an opportunity to understand these complex and rapidly changing market dynamics. The study provides viable strategies for survival and growth in the coming five-year period.

- The personal computer industry is struggling to understand how to reach the Fortune 1000 market effectively. Effective marketing strategies for reaching this huge market are difficult to design and implement.
 - The purpose of this study is to help software vendors establish realistic market plans and pricing strategies that take advantage of profit and growth opportunities in this market.
- To do so, this study includes:
 - Market forecasts of personal computer hardware and software sales to the Fortune 1000 marketplace.
 - Analysis of current vendor strategies for selling to the Fortune 1000.
 - Recommendations for innovative and effective marketing and distribution strategies.
 - Ratings of software product selection criteria used by corporate decisionmakers.
 - Information on preferred distribution channels for purchasing software.
 - Explanation of centralized purchasing procedures.
- Insights into the new products and features needed plus training and support required by the Fortune 1000 marketplace can be found in the report entitled, Analysis of Corporate User Needs, produced in 1985 as part of the Market Analysis and Planning Service.

B. REPORT METHODOLOGY

- For this report the following research was conducted:
 - Twenty vendor interviews with leading microcomputer software companies were completed. The titles of the people interviewed include Director of National Accounts, Manager of Corporate Accounts, and Vice President of Marketing.
 - Fifty interviews with IS department managers in Fortune 1000 companies. The titles of these corporate decisionmakers include Micro Manager, PC Coordinator, and Manager of DP/MIS.
 - Eighty-five end users in companies with sales greater than \$100 million responded to a mail questionnaire. Copies of the questionnaire used are provided in Appendix B.
 - Interviews were carried out in April and May of 1985.
 - The interviews were used to gather data, opinions, and plans for the purpose of performing the analysis for this study.
 - In addition to the interviews, a review of trade press literature and previous INPUT research was done, along with a search through INPUT's extensive vendor and industry files.
- All forecast numbers presented are in current dollars (including inflation impacts). The inflation rate is assumed to be 6% over the forecast period.

C. DEFINITION OF FORTUNE 1000

- For the forecasts, a precise definition of the Fortune 1000 was used. Only the 1000 largest public U.S.-based companies as defined by Fortune magazine in 1985 are included.
- For the sections dealing with marketing strategies, "Fortune 1000" refers to a class of "very large" companies that are similar in size and characteristics to the actual Fortune 1000.
- A breakdown of the categories of companies included in the Fortune 1000 is shown in Exhibit I-1. Generally, to be included in the Fortune 1000, a company must have sales greater than \$400 million.

EXHIBIT I-1

DEFINITION OF FORTUNE 1000 MARKETPLACE* 1984

	CUT-OFF POINT
<ul style="list-style-type: none"> ● Fortune 500 Industrials 	Sales: > \$400M
<ul style="list-style-type: none"> ● Fortune 500 Service: <ul style="list-style-type: none"> - 100 Diversified Service Companies - 100 Commercial Banking Companies - 100 Diversified Financial Companies - 50 Life Insurance Companies - 50 Retailing Companies - 50 Transportation Companies - 50 Utilities 	Sales: > \$590 M Assets: > \$3.7B Assets: > \$1.3B Assets: > \$2.3B Sales: > \$1.4B Sales: > \$417M Assets: > \$3.7B

*Source: Fortune Magazine

II EXECUTIVE SUMMARY

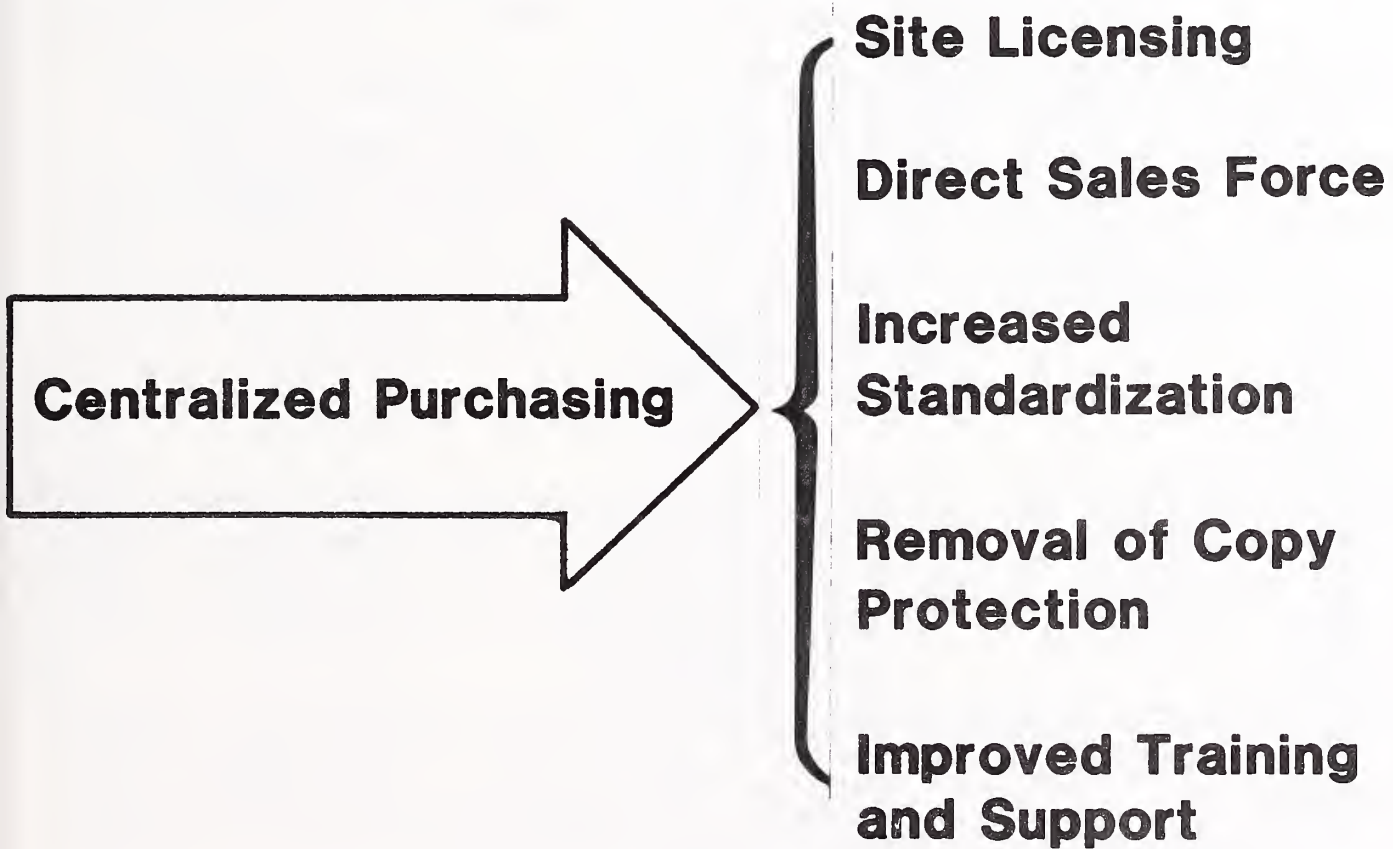
II EXECUTIVE SUMMARY

- This executive summary is designed in a presentation format in order to:
 - Help the busy reader quickly review key research findings.
 - Provide a ready-to-go executive presentation, complete with a script to facilitate group communication.
- Key points of the report are summarized in Exhibits II-1 through II-6. On the left-hand page facing each exhibit is a script explaining the contents of the exhibit.

A. CENTRALIZED PURCHASING FORCING CHANGE

- A new phase in the microcomputer software business is approaching due to centralized microcomputer hardware and software purchasing in the Fortune 1000 market. The changing nature of the buyer is forcing changes in the suppliers.
- As in the twist to the Golden Rule, which states "he/she who has the gold makes the rules," the large corporations with their combined purchasing power are in a position to demand greater flexibility in product and price options from software vendors.
- Through organizations such as MMA (Micro Managers Association) and TASC (Technology Assessment through Strategic Cooperation), the Fortune 1000 is beginning to act as a unit in order to get the products and services they feel they are justified in receiving.
- As shown in Exhibit II-1, the move toward centralized purchasing in large corporations will serve to hasten several trends in the software industry.
- Direct sales will increase not only because of more prevalent site licensing but also because users want more contact with developers.
- Increased standardization, in terms of buying only a select few products, will flow from a corporation's desire to get volume discounts and save on training and support costs.
- Increased compatibility between programs from different vendors will result from the insistence by large corporate users on achieving the productivity gains possible when their large number of users are able to share programs, data, and files.
- Copy protection schemes which hinder use of software products on hard disks (which are in widespread use in large corporations) or on a network are being removed.

CENTRALIZED PURCHASING FORCING CHANGE

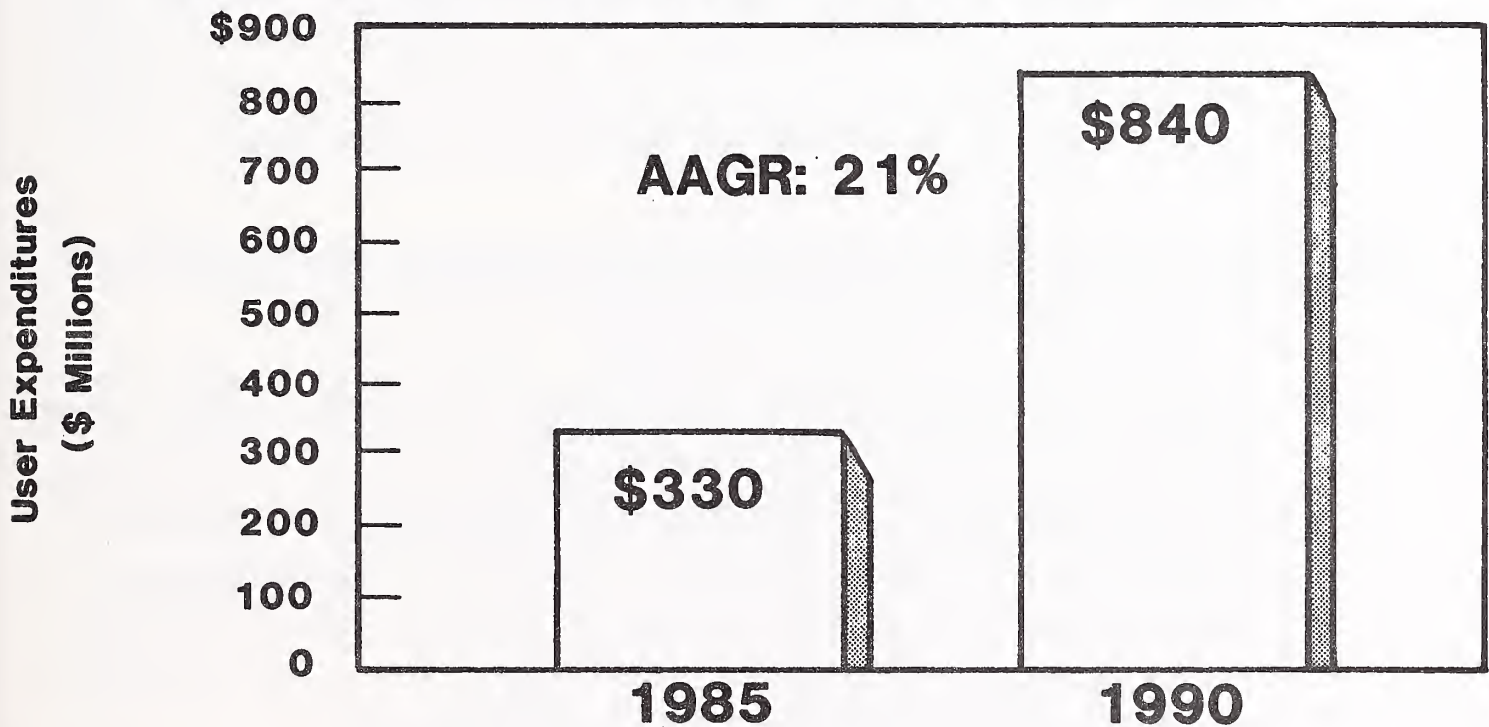


B. FORTUNE 1000 MARKET TO GROW STEADILY

- The Fortune 1000 is a large, growing, and hotly contested market. The frenzied purchasing of both hardware and software by the Fortune 1000 that occurred in 1983 and 1984 was slowed substantially in 1985.
 - However, this will only be a temporary condition as the Fortune 1000 market is expected to experience relatively strong growth for the 1986-1990 period.
 - The Fortune 1000 market employs a vast number of people (close to 24 million), has immense resources (both money and personnel), and is undergoing a concerted effort to boost the productivity of its workers. These fundamental characteristics will provide the underlying foundation that supports the growth of the market.
- The market for cross-industry microcomputer applications software in the Fortune 1000 will grow from \$330 million in 1985 to \$840 million in 1990. This represents a 21% average annual growth rate as shown in Exhibit II-2.
- Currently the leading applications in the Fortune 1000 ranked by 1985 sales are spreadsheets (\$70 million), followed closely by word processors (\$50 million), integrated software (\$42 million), and data base management systems (\$41 million).
- The applications with the highest forecasted five-year rates in the Fortune 1000 are: artificial intelligence (consisting primarily of expert systems and expert system generators, 72% growth), communications (42% growth), graphics (34% growth), and data base management systems (30% growth).

FORTUNE 1000 MARKETPLACE TO GROW STEADILY

Cross-Industry Microcomputer Applications Software User Expenditures, 1985-1990



C. SITE LICENSING WILL PLAY A MAJOR ROLE

- While some large accounts are clamoring for site licensing agreements, many others are only moderately interested.
- Although many vendors have recently adopted a site licensing policy, few have actually been sold. Users are just now acquiring large enough installed bases of PCs to make site licensing practical. In addition, vendors and users alike are confused as to how to best structure a site license.
- Vendors should be flexible in their offerings. While most customers are interested in a site license in order to get a discount, some of the more sophisticated users desire a site license because it provides a better and easier way to purchase and manage the use of software in their company.
- Site licensing confuses the marketplace and slows the sales effort because of the wide range of inconsistent pricing approaches and policies.
- Second and third tier vendors of microcomputer software have been most active in promoting site licensing agreements since they have the most to gain from these arrangements. Typically, these vendors have very limited advertising budgets, tremendous difficulty in garnering retail shelf space, and woefully inadequate distribution networks. In contrast, large microcomputer software companies fear that they would disrupt their existing distribution channels and pricing structures if they offered site licenses.
- These smaller vendors have had initial success with their site licensing programs. However, in the future they will no longer be able to use this as a competitive weapon because the leading firms will gradually institute their own site licensing plans. Site licenses will allow large software firms to tighten their hammerlock on the corporate market.

SITE LICENSING WILL PLAY MAJOR ROLE

- **Micro Managers Demanding Site Licensing**
 - **Many Vendors have Site Licensing Policy**
 - **Few Have Actually Sold One**
 - **Fortune 1000 Interested for Several Reasons**
 - **Many Versions of Site Licenses Exist**
 - **Best Approach Depends on Competitive Position**
-

D. KEEP MULTIPLE SALES FRONTS GOING

- The distribution channels that are proving to be most effective in reaching the Fortune 1000 market are highlighted in Exhibit II-4.
- Micro managers in the Fortune 1000 purchase approximately 55% of their software through retail, 20% direct from the manufacturer, 20% through mail order, and 5% through "other." While retail is expected to decline gradually, both direct sales and mail order will increase. Vendors should try to keep multiple sales fronts open because corporate buyers are purchasing through a number of different channels.
- Maintaining a direct sales force is costly but is all but required if the vendor does not already have a "hit" product that sells well through retail. Vendors must ensure that their programs are sold effectively to their largest potential customers.
- Retailers currently are the leading sellers into the corporate market. Vendors need to target key dealers who are well equipped to sell to the corporate marketplace. These dealers have an outside sales force, are able to provide support and training to corporate clients, and actively sell to the business community.
- A new breed of specialized distributor has arisen: the distributor that specializes in selling to the Fortune 1000 market. These corporate distributors provide a level of service and support along with a wide range of applications that few, if any, distribution channels can match. They are expected to continue their rapid growth and they provide an easy way for a high quality product from a small vendor to gain exposure in the corporate market.
- Electronic distribution of software, although currently nonexistent, will find a place in the Fortune 1000 market. New services from such major companies as General Electric (QUIK*WARE) are paving the way for this delivery mode.

KEEP MULTIPLE SALES FRONTS GOING

**Direct Sales:
Costly but
Essential**

**Key Dealers:
Support
them**

**Corporate
Software
Distributors
Booming**

**Electronic
Distribution:
On the
Rise**

E. RECOMMENDATIONS

- Vendors must enlist the support of both the IS department and end users. IS departments cannot force microcomputer products down the throats of users; rather, they need to solicit user acceptance. While both groups are heavily involved in purchase decisions, the IS department generally has more weight when it comes to volume purchases.
- Because of the sizeable investment in hardware and software already made by large corporations, purchasing patterns are becoming more conservative; consequently, vendors must conform to industry standards.
- Vendors need to understand the difference between who initiates, who influences, and who authorizes the purchase. While there is a trend toward the centralization of software purchases, it is nowhere near as well enforced as the hardware standards. Consequently, it is still a viable strategy to sell to department heads and end users, depending on the product.
- Customers want answers to a range of computer needs, not just standalone personal computer products. They want service, training, and support as well. Being in a position to supply all of these products and services gives a vendor considerable advantage. Because it is difficult, if not impossible, for one vendor to provide for the entire range of needs of customers, most vendors will need to team with other vendors to provide the missing pieces.
- Large companies do not want to deal with any more companies than are necessary. The buyer wants to feel that the vendor understands the user's individual requirements. The basis for the development of an ongoing relationship with a large corporation is to understand their needs and provide solutions to these needs.

RECOMMENDATIONS

- **Sell to IS Department and End Users**
 - **Do Not Ignore Industry Standards**
 - **Understand Internal Purchasing Process**
 - **Align Yourself with Strategic Partners**
 - **Sell Complete Solutions**
 - **Establish Relationship with Customer**
-

F. CONCLUSIONS

- Product performance and features are the top criteria micro managers use for selecting micro software. Price was important only when acquiring software, not when selecting it. Micro-mainframe links and multi-user versions are not of critical importance yet, but they will clearly rise in importance in the future. Because performance is so critical, there will always be room for a few new entrants with innovative, truly useful applications software products.
- Because customers are looking longer term, they want to know about upgrade plans. They want PCs to fit into the existing larger computing environment; consequently, they want to know about plans for networking and micro-mainframe links.
- Purchase decision cycles are becoming longer due to: committee decision-making; increased competition for the sale which increases the "noise" level; the consideration of volume purchases with the commitment to a particular vendor it implies; and the consideration of numerous and often confusing site licensing agreements.
- It is important for vendors to understand the "superusers" (those users who use, test, and develop new applications) in large corporations, for they are a potent force. Not only do they influence purchases through word of mouth, but in many cases, they heavily influence volume purchases.
- Few vendors can succeed in the overall business market without also having a strong presence in the Fortune 1000. Success in this marketplace can lead to success in the overall market because large corporations, with their volume purchases, not only significantly impact the bottom line of vendors, but influence the buying patterns of smaller businesses as well. Because of their combined purchasing power, the Fortune 1000's purchasing habits determine much of the computer industry's fate.

CONCLUSIONS

- **Performance and Features Still Most Important**
 - **Customers Are Looking Longer Term**
 - **Purchase Decision Cycles Becoming Longer**
 - **Important to Understand Superusers**
 - **Succeeding in the Fortune 1000 is Critical**
-

III MARKET FORECASTS AND TRENDS

III MARKET FORECASTS AND TRENDS

A. SOFTWARE SHIPMENTS TO THE FORTUNE 1000

- The leading personal computer software applications sold to the Fortune 1000 in 1984 were spreadsheets, integrated software packages, and word processing programs, followed by data base managers.
 - The 10 leading applications for the Fortune 1000 market in 1984 are shown in Exhibit III-1.
- The growth of software in the corporate marketplace has been explosive. Although 1985 has experienced a rather dramatic slowdown in growth, INPUT expects a rebound to occur in 1986 with steady growth rates returning and continuing for the remainder of the decade for most categories of software.
 - Market size and growth rates for the leading application categories are shown in Exhibit III-2 and III-3.
 - The fastest growing applications are shown in Exhibit III-4.
 - A comparison of overall U.S. business market size and growth with that for the Fortune 1000 is shown in Exhibit III-5.
 - Assumptions that were made for these forecasts are listed in Exhibit III-6.

EXHIBIT III-1

LEADING MICROCOMPUTER SOFTWARE APPLICATIONS IN FORTUNE 1000 1984

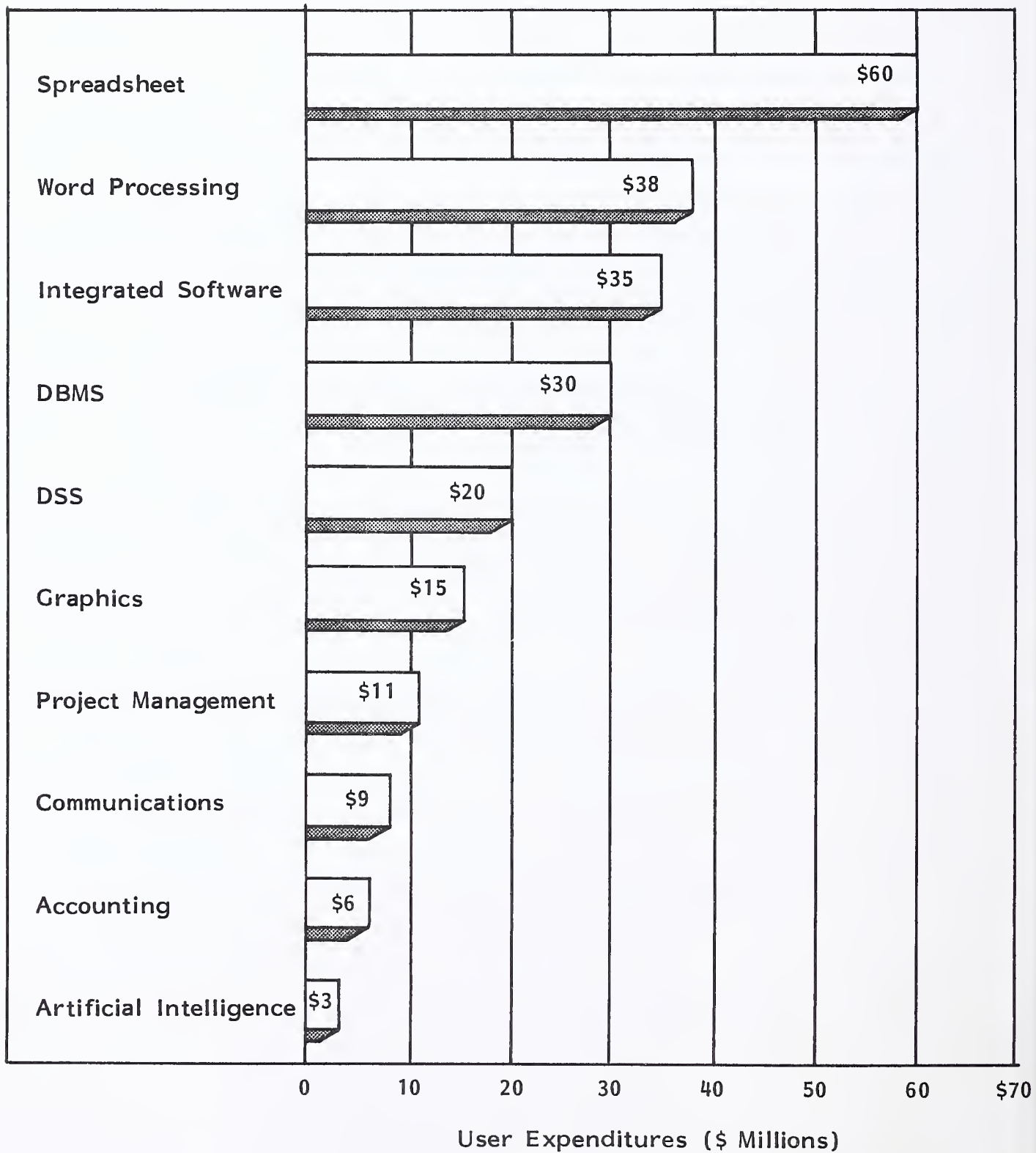


EXHIBIT III-2

FORTUNE 1000 USER EXPENDITURE FORECAST BY APPLICATION, 1985-1990

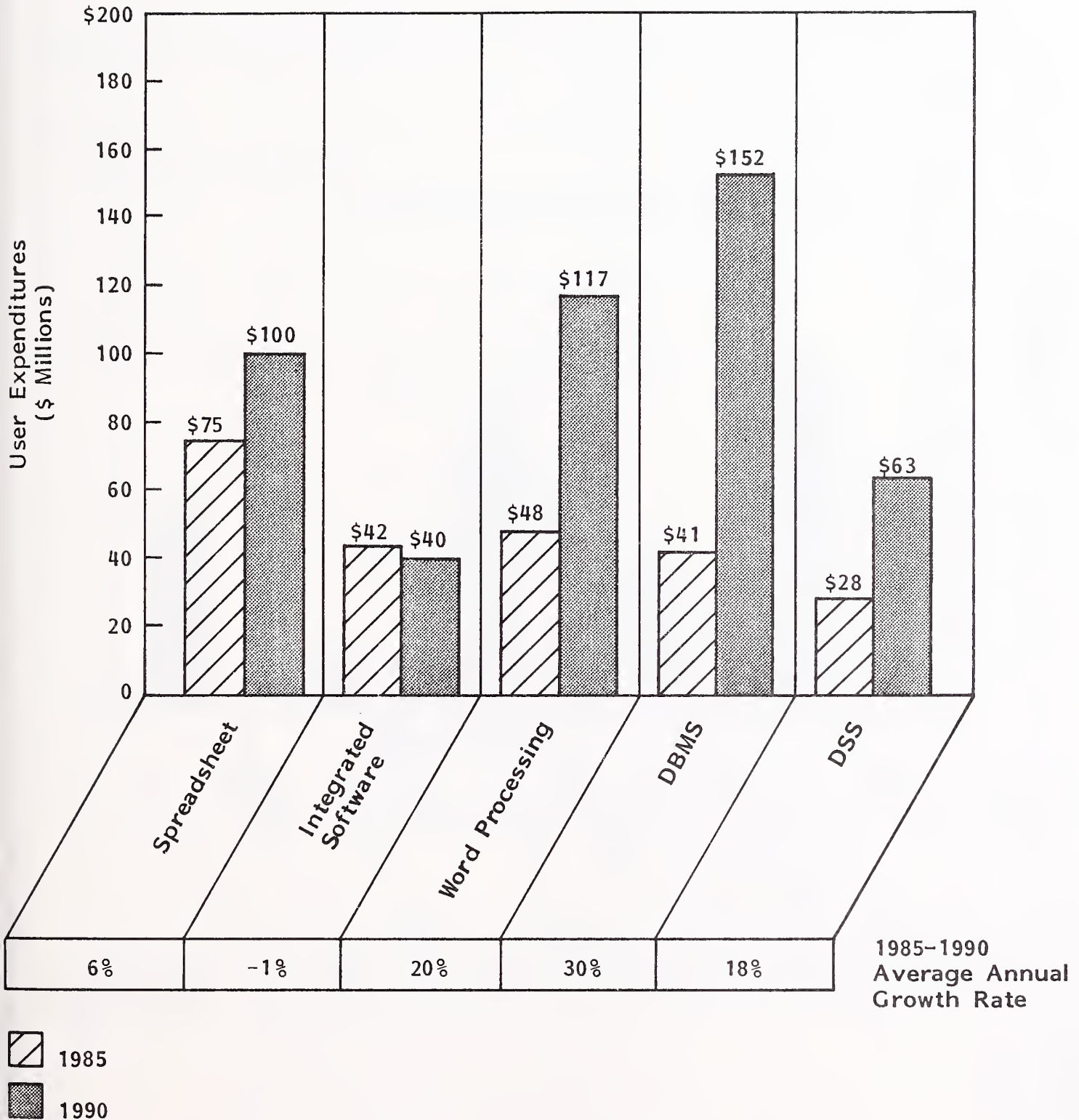


EXHIBIT III-3

FORTUNE 1000 USER EXPENDITURE FORECAST BY APPLICATION, 1985-1990

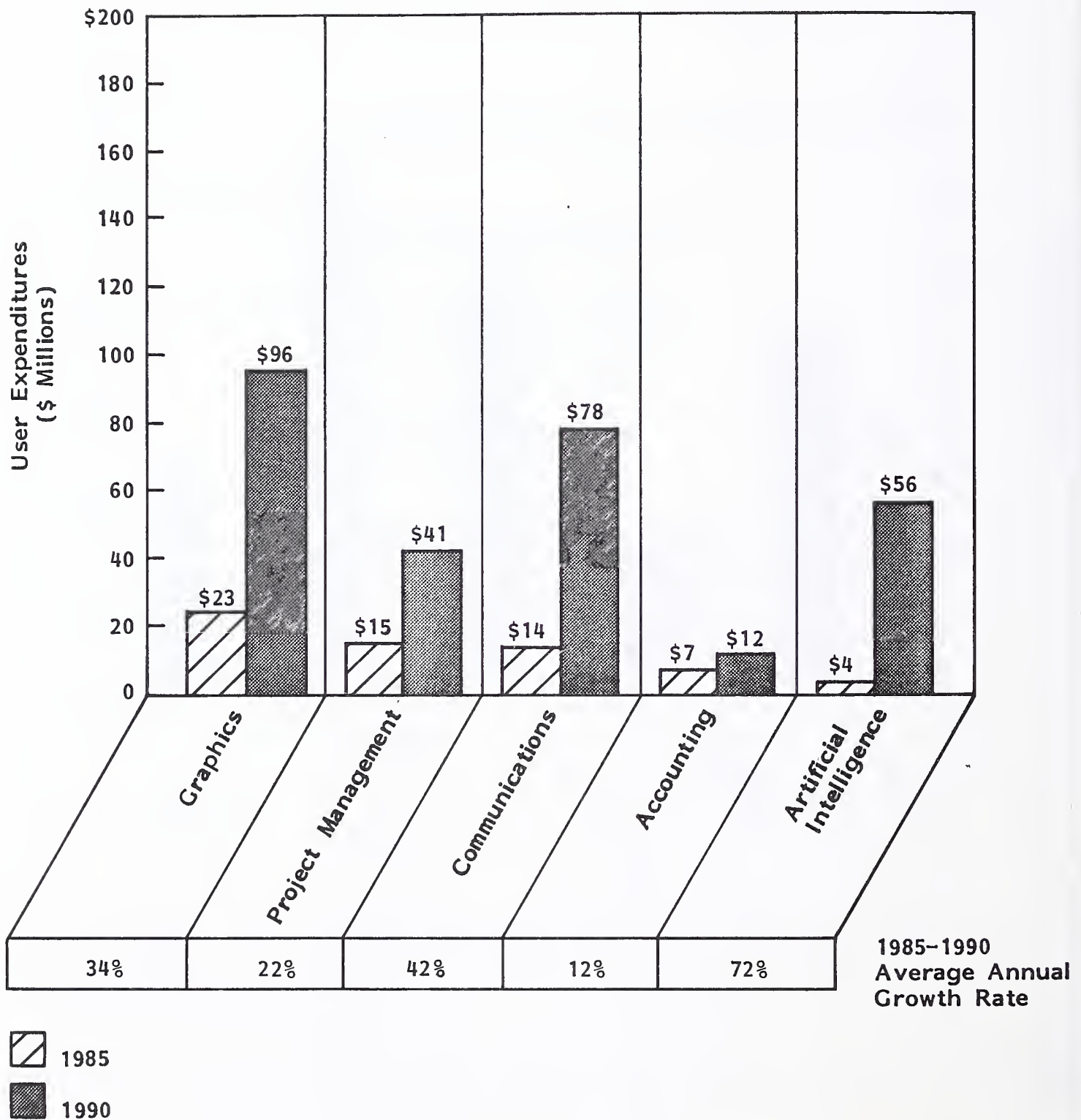


EXHIBIT III-4

FASTEST GROWING MICROCOMPUTER APPLICATIONS
IN THE FORTUNE 1000 MARKET, 1985-1990

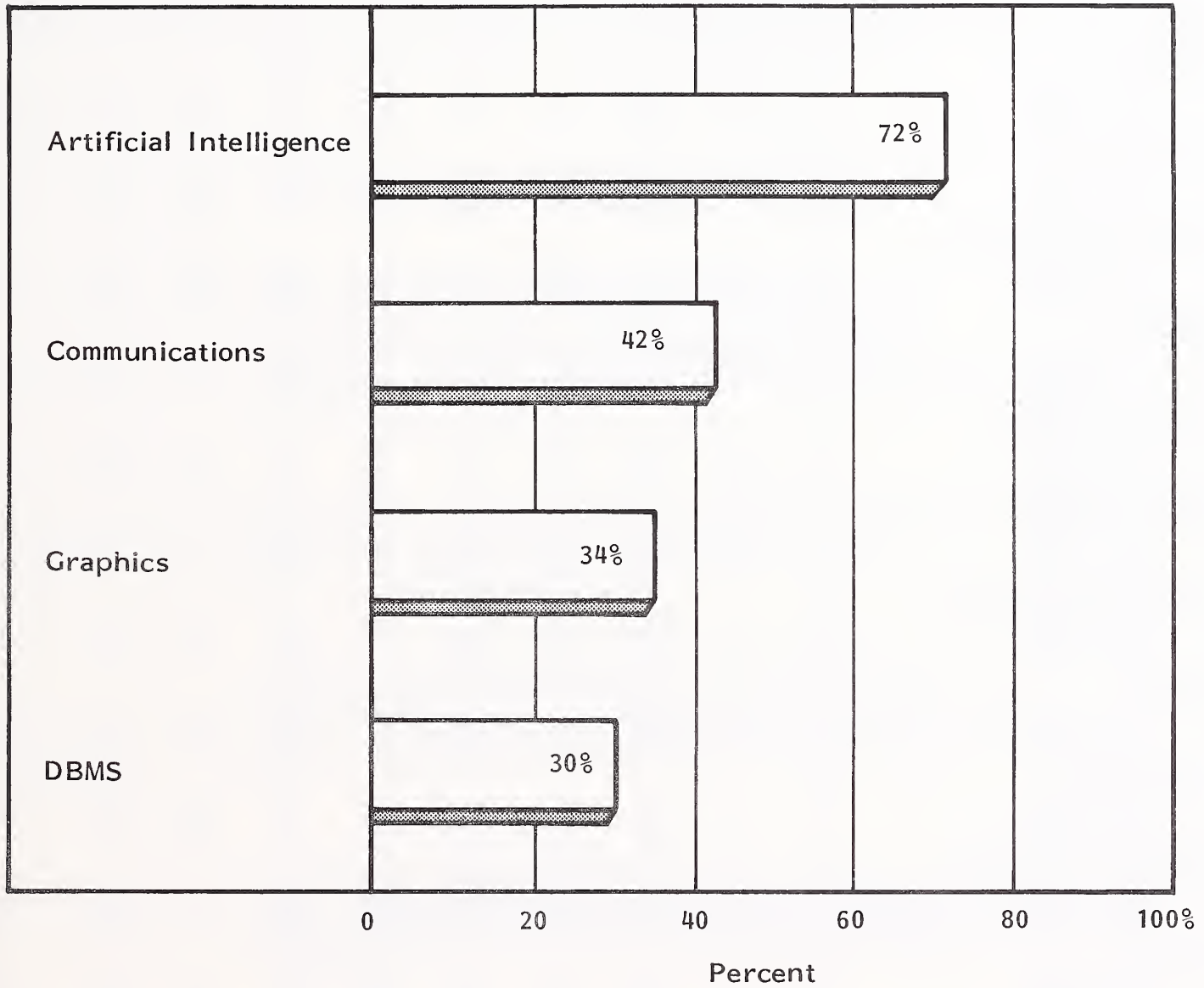


EXHIBIT III-5

USER EXPENDITURES FORECAST CROSS-INDUSTRY MICROCOMPUTER SOFTWARE MARKET, 1984-1985

MARKET CATEGORY	(\$M) 1984	84-85 GROWTH	(\$M) 1985	(\$M) 1986	(\$M) 1987	(\$M) 1988	(\$M) 1989	(\$M) 1990	85-90 AAGR
SPREADSHEET									
U.S. BUSINESS	300	30%	390	449	493	528	554	571	8%
FORTUNE 1000	60	25%	75	84	90	94	97	99	6%
WORD PROCESSING									
U.S. BUSINESS	255	30%	330	415	500	575	650	710	16%
FORTUNE 1000	38	25%	48	59	72	86	102	117	20%
DATABASE MANAGEMENT SYSTEMS									
U.S. BUSINESS	251	40%	352	475	617	790	995	1195	28%
FORTUNE 1000	30	35%	41	57	77	102	127	152	30%
ACCOUNTING									
U.S. BUSINESS	195	37%	267	374	505	631	732	813	25%
FORTUNE 1000	6	15%	7	8	9	10	11	12	12%
INTEGRATED SOFTWARE									
U.S. BUSINESS	159	15%	183	190	190	180	171	163	-2%
FORTUNE 1000	35	20%	42	44	45	45	43	40	-1%
PROJECT MANAGEMENT									
U.S. BUSINESS	20	40%	28	39	51	64	73	82	24%
FORTUNE 1000	11	40%	15	21	27	32	37	41	22%
DECISION SUPPORT SYSTEMS									
U.S. BUSINESS	25	40%	35	46	55	63	70	79	18%
FORTUNE 1000	20	40%	28	36	44	50	56	63	18%
GRAPHICS									
U.S. BUSINESS	60	45%	87	124	174	226	283	340	31%
FORTUNE 1000	15	50%	23	33	46	62	80	96	34%
COMMUNICATIONS									
U.S. BUSINESS	45	45%	65	95	132	185	250	325	38%
FORTUNE 1000	9	50%	14	20	29	42	58	78	42%
ARTIFICIAL INTELLIGENCE									
U.S. BUSINESS	5	60%	8	14	26	45	68	102	66%
FORTUNE 1000	2.5	50%	4	7	12	22	35	56	72%
OTHER *									
U.S. BUSINESS	128	25%	160	200	250	300	360	432	22%
FORTUNE 1000	26	24%	32	39	49	60	71	84	22%
TOTAL U.S. BUSINESS **	1443	32%	1905	2421	2993	3587	4206	4812	20%
TOTAL FORTUNE 1000 MARKET **	252.5	30%	329	408	500	605	717	838	21%

* OTHER INCLUDES DESKTOP ACCESSORIES, STATISTICS, EDUCATION AND TRAINING,
HUMAN RESOURCES, SALES AND MARKETING, AND ENGINEERING AND SCIENTIFIC.

**EXCLUDES ALL INDUSTRY-SPECIFIC APPLICATIONS

EXHIBIT III-6

ASSUMPTIONS MADE FOR SOFTWARE FORECAST

- **WORD PROCESSING:** excludes dedicated word processors.
- **ACCOUNTING:** excludes vertical market packages and human resource packages.
- **INTEGRATED SOFTWARE:** excludes Lotus 1-2-3 and Supercalc Series, which are counted under spreadsheets. Counts only tightly integrated software; excludes loosely integrated packages and operating environments.
- **GRAPHICS:** includes business graphics packages. Does not include peripherals such as cards, digitizers, plotters, etc.
- **COMMUNICATIONS:** includes Electronic mail. Under electronic mail, only in-house systems and not subscription systems are counted. Includes software used for connecting to networks or on-line data bases.
- **ARTIFICIAL INTELLIGENCE:** includes expert systems, expert system generators, and natural language query systems. Does not include programming languages or hardware.
- **DSS:** includes financial modelling programs. Excludes spreadsheets, integrated software, and artificial intelligence packages.

- The industry is still dominated by a brand name mentality which rewards the most well known vendors and products. Corporate purchasers seem wedded to the dominant brands (i.e., Lotus, Ashton-Tate, Microsoft, Multimate).
 - These are names corporations know and trust for they feel that these companies are the most likely to be around in the future to support and upgrade their products.
 - Corporations are buying larger quantities of software packages from fewer vendors instead of different packages from many different software publishers.
 - The leading products in the Fortune 1000 are listed in Exhibit III-7.

B. HARDWARE SHIPMENTS TO THE FORTUNE 1000

- Large corporations went on a spending spree in 1983 and 1984. Sales have slowed somewhat to this market in 1985, but will pick up again in 1986 and remain strong through 1990.
 - Forecasts for annual hardware shipments to the Fortune 1000 are shown in Exhibit III-8. The five-year average annual growth rate is 26%.
 - The installed base of microcomputers in the Fortune 1000 for the next five years is shown in Exhibit III-9.
 - The installed base of microcomputers will increase 200% from 1985 to 1990.

EXHIBIT III-7

LEADING PRODUCTS BY APPLICATION IN FORTUNE 1000, 1984

CATEGORY	PRODUCT	VENDOR
Word Processing	Displaywrite Series Multimate Wordstar	IBM Multimate International Micropro
Spreadsheet	Lotus 1-2-3 SuperCalc Multiplan	Lotus Development Corp. Sorcim/IUS Microsoft
Graphics	Chartmaster Energraphics Graphwriter	Decision Resources Enertronics Research Graphics Communications Inc.
DBMS	dBase II, III Dataease Knowledgeman R:BASE 4000	Ashton-Tate Software Solutions Micro Data Base Systems Microrim
Communications	Crosstalk Relay	Microstuf VM Personal Computing

Source: Compilation of INPUT estimates, vendor estimates, Corporate Software Bestseller lists, Softsel Hotlist, and Business Computer Systems Business Bestseller List.

Continued

EXHIBIT III-7 (Cont.)**LEADING PRODUCTS BY APPLICATION
IN FORTUNE 1000, 1984**

CATEGORY	PRODUCT	VENDOR
Project Management	Harvard Total Project Manager Advanced Pro-Ject 6 Microsoft Project	Harvard Software Softcorp Microsoft
Accounting	Business Series Accounting Series Accounting Series	BPI Systems Real World Business Software Open Systems
Integrated Software	Symphony Framework Smart Software Enable	Lotus Ashton-Tate Innovative Software The Software Group
DSS	IFPS/Personal Encore	Execucom Ferox Microsystems
Artificial Intelligence	T.1 Clout Edge Business Software Series	Tecknowledge Microrim Human Edge Software

Source: Compilation of INPUT estimates, vendor estimates, Corporate Software Bestseller lists, Softsel Hotlist, and Business Computer Systems Business Bestseller List.

EXHIBIT III-8

ANNUAL SHIPMENTS OF MICROCOMPUTERS
TO THE FORTUNE 1000, 1985-1990

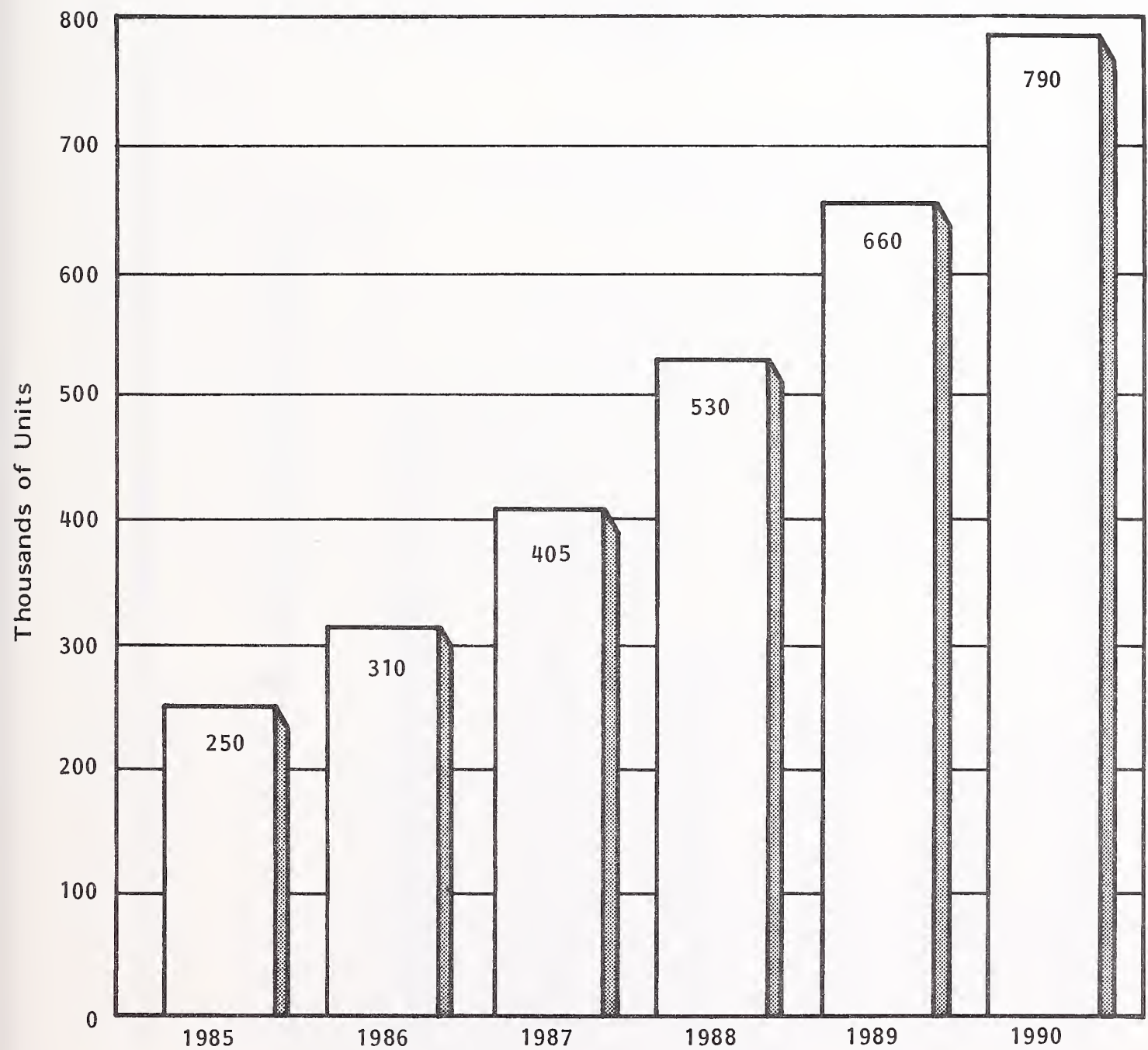
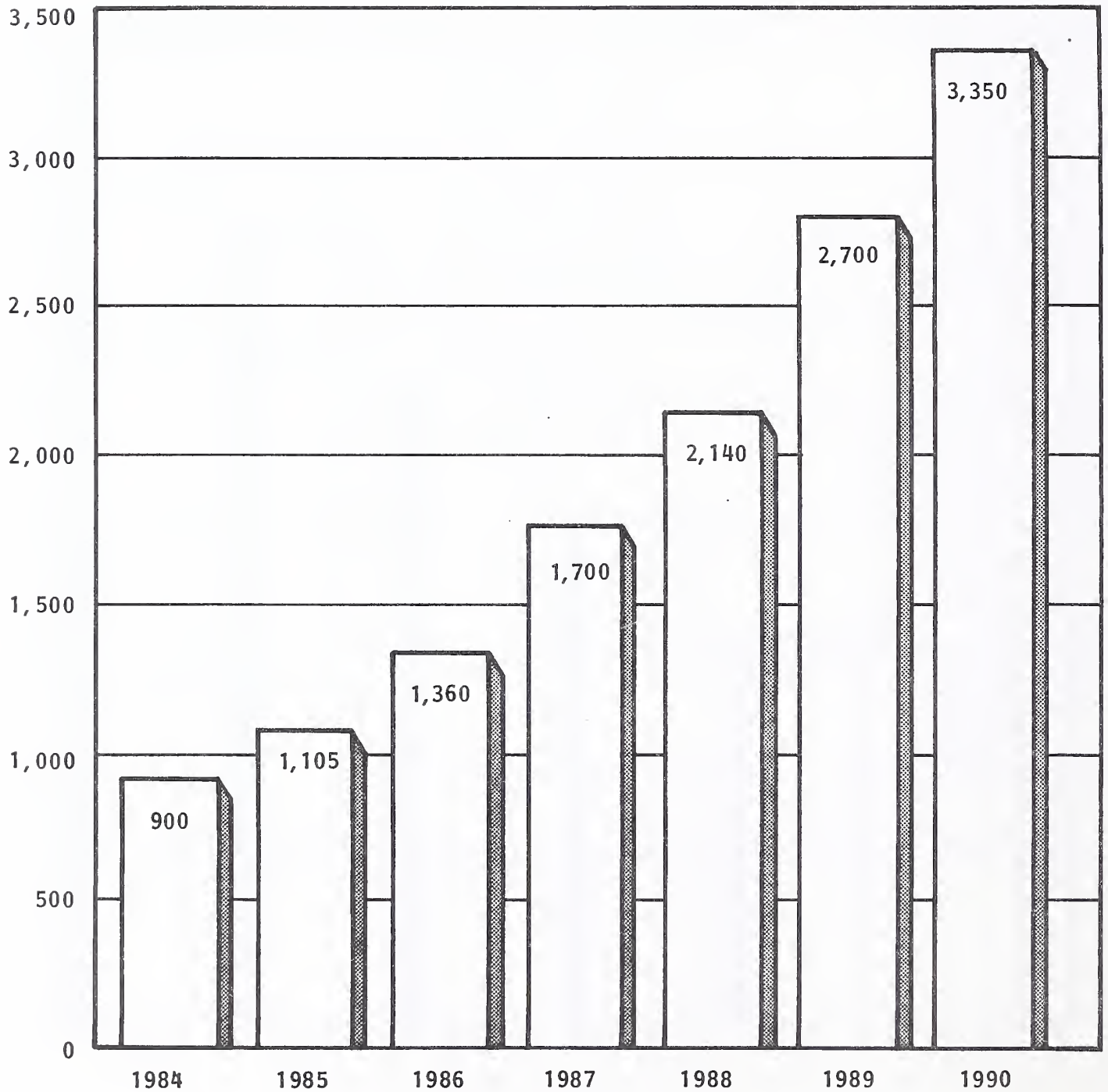


EXHIBIT III-9

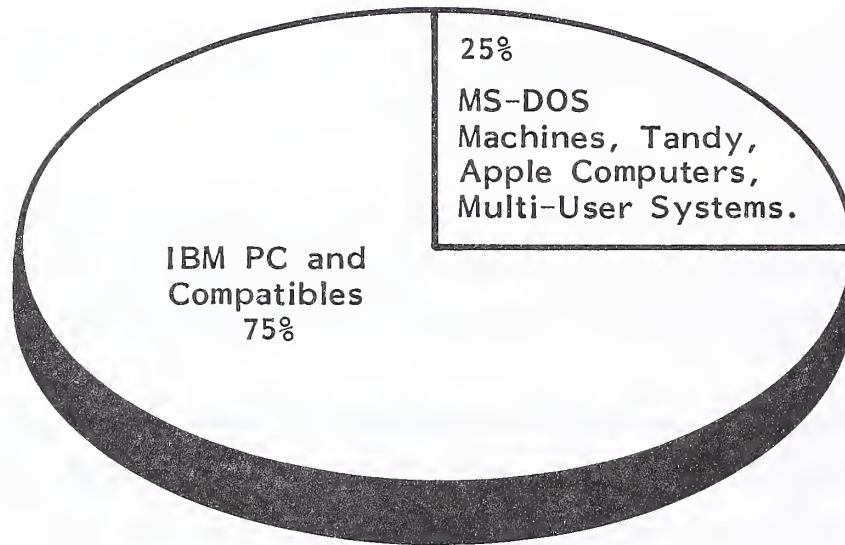
INSTALLED BASE OF MICROCOMPUTERS IN THE
FORTUNE 1000, 1984-1990



- Currently, and for the future, IBM dominates the corporate PC marketplace.
 - The IBM PC is a clear favorite of IS managers in the Fortune 1000, and these people are now generally the ones deciding which PCs companies will buy.
 - IBM compatibility has become a de facto standard in the Fortune 1000.
 - The clear dominance of the IBM PC and, to a lesser degree IBM PC-compatibles, is shown in Exhibit III-10.
- Presently there are very low levels of multi-user micros and supermicros in large businesses. The capabilities of a supermicro are not needed in a large business. Consequently, supermicros are found primarily in small business.
- The skewed nature of the installed base is shown in Exhibit III-11. There are currently only about 100 companies in the Fortune 1000 with more than 1,000 microcomputers installed. This information is vital when a vendor needs to forecast the potential market for a site license program that requires a minimum of 500 or 1,000 copies (as a number of vendors have done). Clearly, there is a very limited market for such huge volume shipments of software at present, although continued growth in the installed base of microcomputers will alter this situation.
- The assumptions made for the hardware forecasts are listed in Exhibit III-12.
- The forecasts and assumptions made for the overall U.S. business market are presented in Exhibits III-13, III-14, and III-15.
- While the growth of the personal computer shipments to the overall U.S. business market has slowed substantially in 1985, shipments to the Fortune 1000 have not slowed quite as much. The reasons for the current strength and future growth in the Fortune 1000 market include:

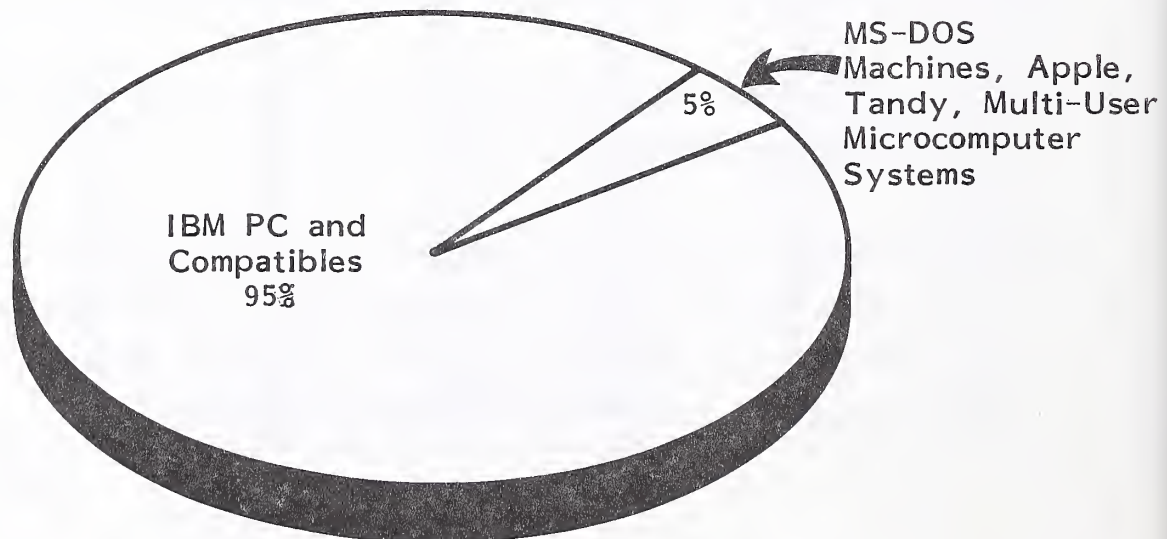
EXHIBIT III-10

BREAKDOWN OF INSTALLED BASE OF
MICROCOMPUTERS IN THE FORTUNE 1000



Total Units: 1,105,000

Breakdown of Microcomputer Annual Shipments, 1985



Total Units: 250,000

EXHIBIT III-11

MICROCOMPUTER INSTALLED BASE IN FORTUNE 1000 IS UNEVENLY DISTRIBUTED

100 Firms with
Largest Installed
Base of Micros

- 31% of Installed Microcomputers (280,000)
- Average of 2,800 per Firm
- Range of Microcomputers Installed is 1,000 - 25,000

900
Remaining
Firms

- 69% of Installed Microcomputers (620,000)
- Average of 688 per Firm
- Range of Microcomputers Installed is 100 - 1,000

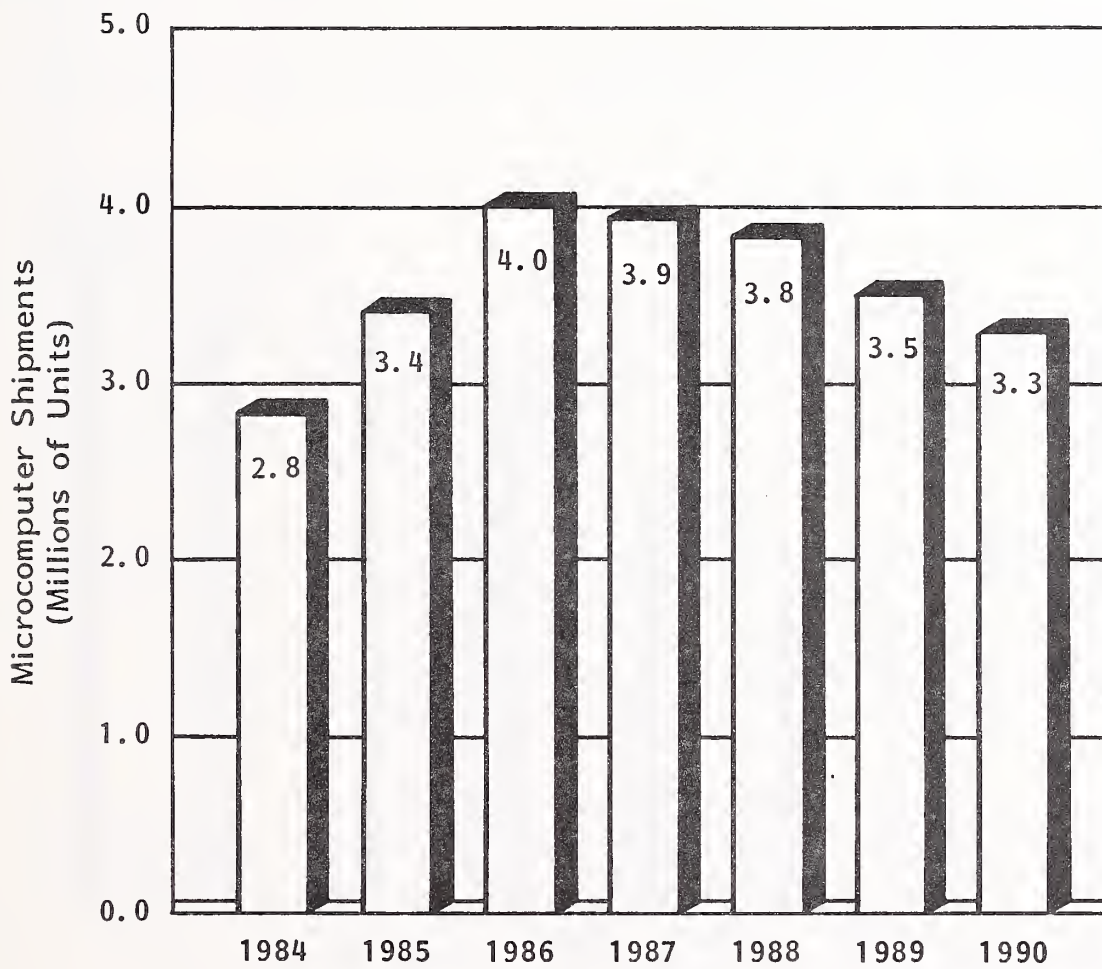
EXHIBIT III-12

ASSUMPTIONS MADE FOR FORTUNE 1000 MICROCOMPUTER HARDWARE FORECAST

- The forecast is for sales to the Fortune 1000 as defined by Fortune magazine in 1985.
 - Thus, the forecast is for the 1000 largest public U.S.-based companies only. Excluded from this forecast are: government offices, educational institutions, private companies, and multinational firms with headquarters outside the U.S.
 - If one were to consider the Fortune 1000 as a class of company, rather than 1000 specific companies, then one would add in these other large companies, organizations, and institutions. Doing so would effectively double the forecasts.
- The widespread use of telecomputers (telephones and computers joined in one device) and laptops in the Fortune 1000 will spur the growth in the latter years of the forecast period.
- Includes microcomputers purchased for the office and for the factory.
- For the installed base forecast, a retirement rate of 5% per year for 1985 and 1986 and 2% per year for 1987 through 1990 was assumed.

EXHIBIT III-13

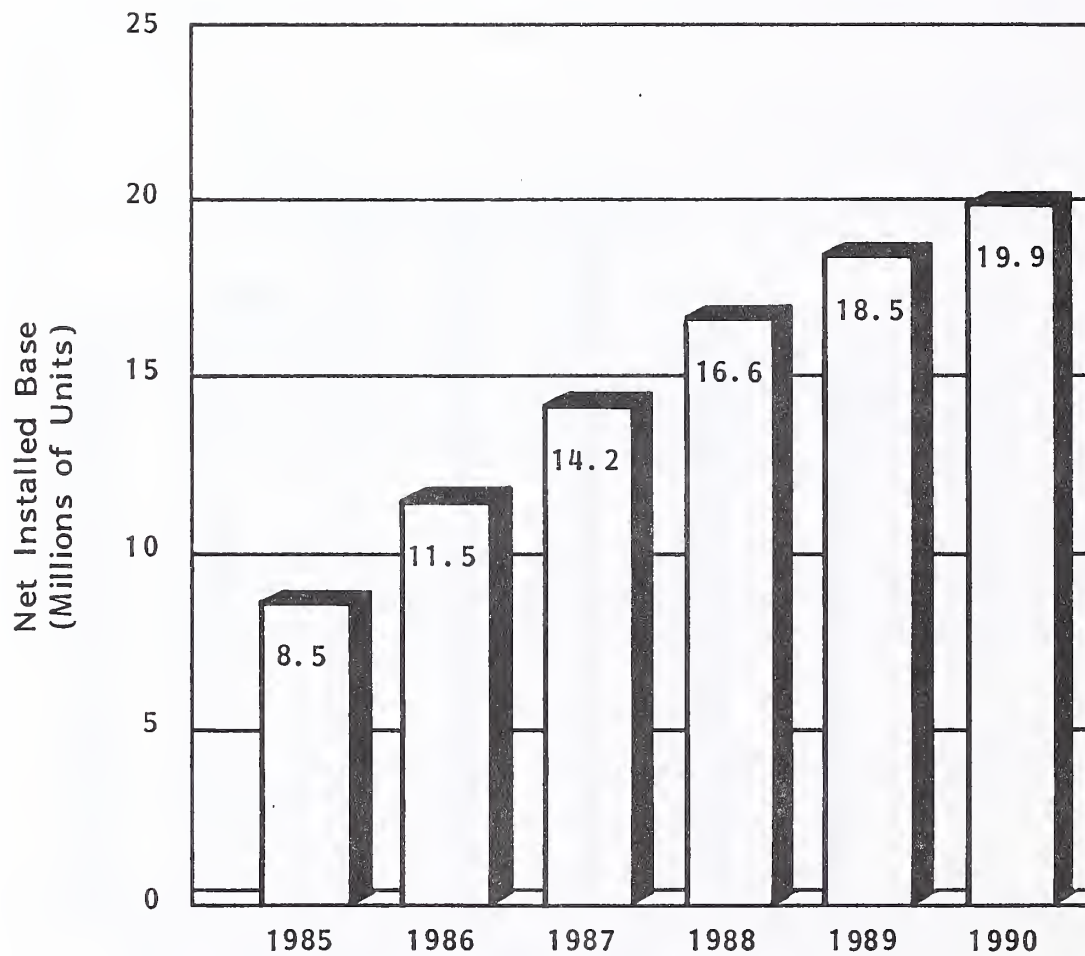
ANNUAL SHIPMENTS OF MICROCOMPUTERS*
TO THE U.S. BUSINESS MARKET
1984-1990



* U.S. sales of microcomputers selling for less than \$15,000 that are used for business.

EXHIBIT III-14

NET INSTALLED BASE OF MICROCOMPUTERS*
IN THE U.S. BUSINESS MARKET,
1985-1990



* U.S. sales of microcomputers selling for less than \$15,000 that are used for business.

EXHIBIT III-15

ASSUMPTIONS MADE FOR U.S. BUSINESS MICROCOMPUTER HARDWARE FORECASTS

- The forecast is for U.S. sales only.
- The forecast includes computers bought for business use; computers bought for home and classroom use are excluded. However, computers used for administrative purposes in educational institutions are included.
- A computer must be used at least half the time for business purposes to be included as a business computer.
- The definition of the computers counted in the forecast is as follows:
 - Price range: Less than \$15,000 in current dollars for a complete system, including monitor, memory, and storage.
 - Minimum configuration: 8-bit CPU, 64K RAM, monitor, and one floppy disk drive (unless it is a portable).
 - The forecast counts only those machines that can serve as standalone computers and are sold for general purpose use. Consequently, the following products are not included:
 - Dedicated word processors, graphics workstations, dedicated CAD/CAM systems, terminals, and intelligent terminals with memory but no CPU.
 - Machines that are counted include personal computers, multi-user computers, intelligent workstations, executive workstations, and telecomputers.
 - Multi-user systems sold for less than \$15,000 are included; however, only the CPU is counted, the terminals are not.
 - A personal computer connected to a host or to a network is counted, but the computer must have some form of local storage.
 - Workstations, to be counted, must be able to function on a standalone basis.
 - Portables, luggables, and laptop computers are included.

- Demand for more personal computers on the part of end users has not subsided in the least. Rather, the pace of acquisition by the IS departments has slowed temporarily.
- Only 900,000 computers are currently installed in a market with an estimated 12 million white collar workers.
- Many companies are attempting to provide one personal computer for each knowledge worker. (On the other hand, many companies will settle for one personal computer for every three to five knowledge workers.)
- "Ruggedized" microcomputers (specially encased to withstand the factory floor environment) will eventually be sold in sizeable numbers into the factory.
- The Fortune 1000 has the money to spend on computers.
- The infrastructure to support, train, purchase, and maintain large quantities of PCs and PC users is now in place in many Fortune 1000 companies. Thus, they can manage the introduction of large numbers of microcomputers. This will allow for continued growth.
- Upper managements are very conscious of improving the productivity of their workers; more importantly, most are willing to make the investment in automation to improve their worker productivity if productivity benefits can be clearly shown.
- In most large companies, personal computers have clearly demonstrated their value in making productivity gains. (However, this has not been clearly demonstrated in all cases.)

- The more microcomputers that are installed into a network, the more important it becomes for an office worker to be able to tap into that network in order to be able to communicate and share information with others. Most companies have not reached this critical mass yet.
- The reasons Fortune 1000 purchasers are tending to hold off buying microcomputers in the near term include:
 - 1985 is a year of consolidation and reevaluation. After going on a spending spree in 1984, many companies are taking time to catch their breath and assess the usefulness of micros currently in place.
 - The corporate decisionmaking process has become stretched out because purchases have become centralized. There is more bureaucracy now, which inevitably slows things down. When large corporations make a purchase that will affect the company's performance over a number of years, they are likely to study the move more carefully than those individuals who bought personal computers individually with departmental or individual expense accounts.
 - Companies are trying to think about their future needs. They are spending more time in long-range planning to ensure that personal computers are properly integrated into the company's information systems strategy.
 - Companies are sharing micros among many users rather than purchasing one for every person who uses one. In the long term, this sharing will be reduced as users are able to demonstrate the need to have their own PC.
 - Waiting for the unannounced (and now postponed) IBM PC II.

- Waiting to see if a standard solution to networking emerges soon. Integration is a key issue in office automation.
- Large companies are confused. They are postponing decisions.
- There is an indigestion problem in the Fortune 1000 because so many microcomputers were bought in such a short period of time. Now, companies are finding that the next wave of users needs more training and support.
- Realization by customers of the hidden costs of using personal computers. Training is a key hidden cost of personal computing. Other costs include maintenance, new furnishings, and the additional hardware and software expenditures that are usually required for each machine.

C. CONNECTIVITY OF MICROCOMPUTERS IN THE FORTUNE 1000

- Within the corporate environment, connectivity is inevitable. What is not certain is the form this connectivity will take. Large corporations strongly value the ability to connect what are now islands of automation, while remaining cognizant of the high costs and difficulties involved.
 - As PCs have proliferated, they have led to a growing demand for access to centralized data bases and communications between other PCs. Users want to share data, programs, and expensive peripherals.
 - Communications between fellow workers and among various computers will be vital. The whole purpose of automating is to improve productivity, and networked PCs eventually will improve productivity (although currently this is not necessarily the case).

- Most Fortune 1000 companies are anxious to install networks, provided certain cost, security, and administrative problems are overcome, standards emerge, and applications software becomes available.
- The majority of companies will have installed some type of LAN by next year, but in most cases they will be small pilot projects.
- Most PCs will be tied into company networks by 1990 via either micro-mainframe links, LANs, or PBXs.
- Exhibit III-16 indicates the level of connectivity of microcomputers both today and in 1990.
- Assumptions made for this forecast are shown in Exhibit III-17.
- Determining the number of microcomputers that are connected to some type of network is crucial for determining multi-user pricing and development strategies.
- The distribution of the installed base of LANs by vendor is listed in Exhibit III-18.
- Most of the connectivity interest has focused on the micro-mainframe link since the vast majority of a large corporation's computing activity centers around the mainframe. Additional information on this subject can be found in Micro-Mainframe Market Analysis and in Micro-Mainframe End-User Experiences.
- Many managers delayed making a decision on networks until IBM's Token Ring Network was announced. So far, only the PC components were announced; nothing has been shipped. All of the remaining pieces are not likely to be announced and ready to go for at least two more years.

EXHIBIT III-16

LEVEL OF CONNECTIVITY OF
MICROCOMPUTERS IN THE FORTUNE 1000

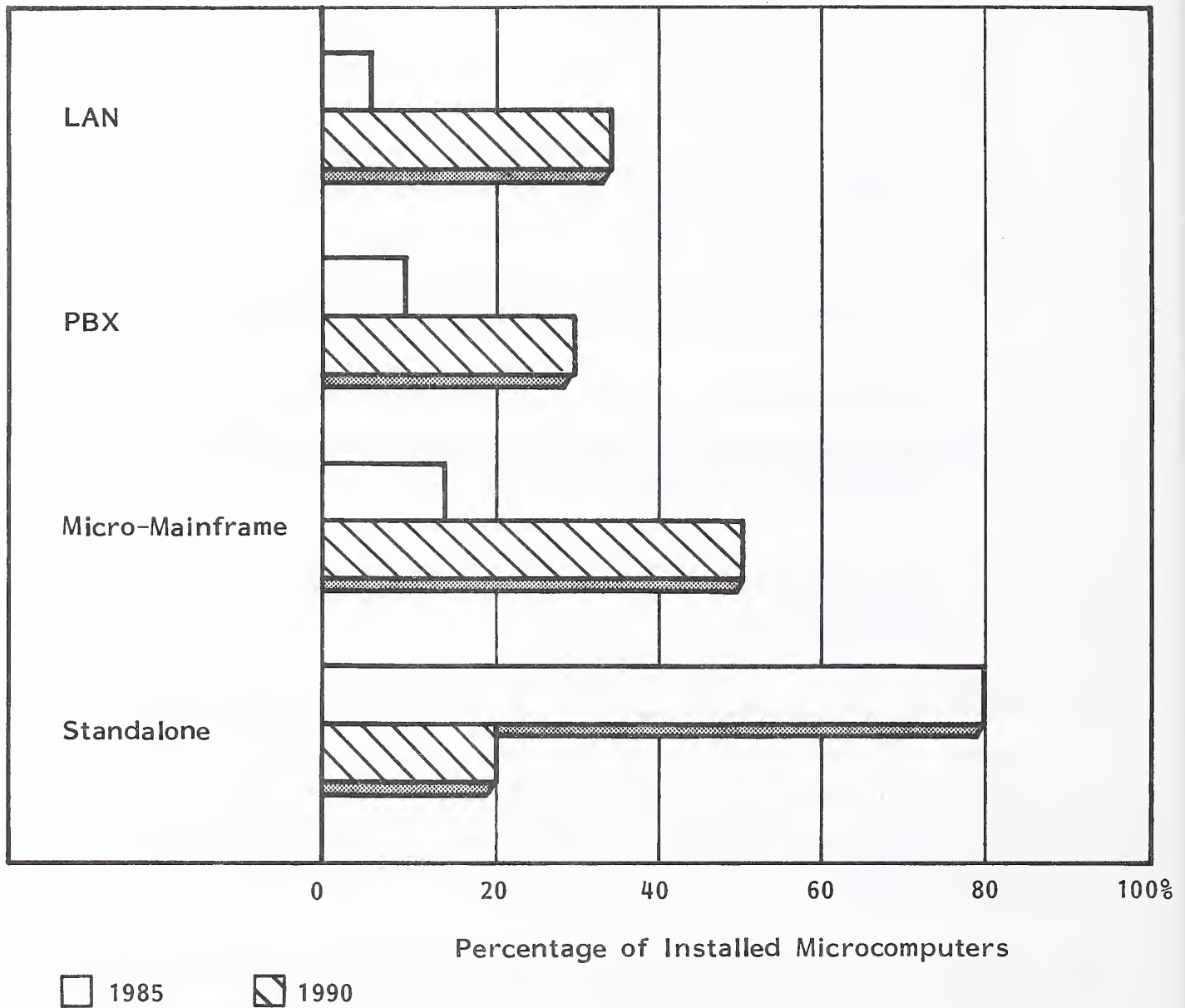


EXHIBIT III-17

ASSUMPTIONS MADE FOR CONNECTIVITY FORECASTS

- MICRO-MAINFRAME: Includes hardware connections, modem connections, terminal emulators, and intelligent links.
 - The majority are linked via modem and terminal emulation packages.
- LAN: The IBM Token Ring, which will be the predominant network in the Fortune 1000, will not be widely used until 1988 or 1989.
 - Prices of LAN connections will drop dramatically when single chip interfaces become available.
 - However, the high amount of administration and overhead associated with installing and operating a LAN will slow the adoption rate.
- PBX: Fourth generation PBXs have a LAN built in. These are counted as both LANs and PBXs.
- If a LAN is connected to a mainframe, all of the microcomputers are counted as being connected to the mainframe.

EXHIBIT III-18

MICROCOMPUTERS IN INSTALLED BASE CONNECTED
TO LANs IN FORTUNE 1000
1984

COMPANY	NUMBER OF PCs CONNECTED
Corvus	15,000
3Com	8,000
Ungermann-Bass	5,000
Nestar	5,000
Sytek	3,000
Other	14,000
Total	50,000

- The PC Network will not be a serious market factor in the Fortune 1000. Rather, this market will wait for IBM's Token Ring Network. In fact, IBM itself has shown little enthusiasm for its PC Network.
 - IBM will undoubtedly push its Token Ring Network at the expense of the PC Network. The Token Ring is designed to provide the corporate-wide backbone network, linking mainframes, minis, and micros. This is the primary type of network large companies will install.
 - The Token Ring Network is intended to serve as an intermediary between departmental LANs and mainframe SNA networks. The PC Network is designed to link departmental and work group computers. However, the Token Ring will very likely be the LAN of choice for departmental micros as well.
- The problems cited with installing networks are:
 - Lack of clear standards in networks.
 - The difficulty in managing networks.
 - Security.
 - Software licensing issues.
 - Lack of useful applications.
 - High initial cost.
 - Additional "hidden" costs.

- In addition, LAN growth has been stunted by:
 - Confusion on the part of potential customers regarding costs, standards, and methods.
 - Lack of a standard network-operating system around which applications programs can be written by software vendors.
 - Corporations do not want to be a pioneer with these networking technologies except on a small scale. They are cautious about moving too quickly into communications technology, especially when it does not have IBM's seal of approval. Large corporations are not going to be adventurous when it comes to installing LANs. They are going to wait until a complete solution is available, including software from a major vendor such as IBM, before committing to anything.
 - The amount of overhead and administration associated with LANs goes up tremendously as more users are added to the network. This will keep many computers off the network because the resource-constrained IS departments will not be able to install LANs at a very rapid rate.

D. DEMOGRAPHIC INFORMATION

- An astounding number of employees are included in the Fortune 1000. Fortune magazine claims nearly 24 million people are employed by the largest 1000 companies (see Exhibit III-19).
 - The concentration of workers in the largest companies is shown in Exhibit III-20.
- An estimated distribution of the users of personal computers in the Fortune 1000 is shown in Exhibit III-21.

EXHIBIT III-19

NUMBER OF EMPLOYEES IN FORTUNE 1000
1984

Fortune 500 Industrials:

14.2 Million

Fortune 500 Service:

9.5 Million

Total:

23.7 Million

Source: Fortune Magazine

EXHIBIT III-20

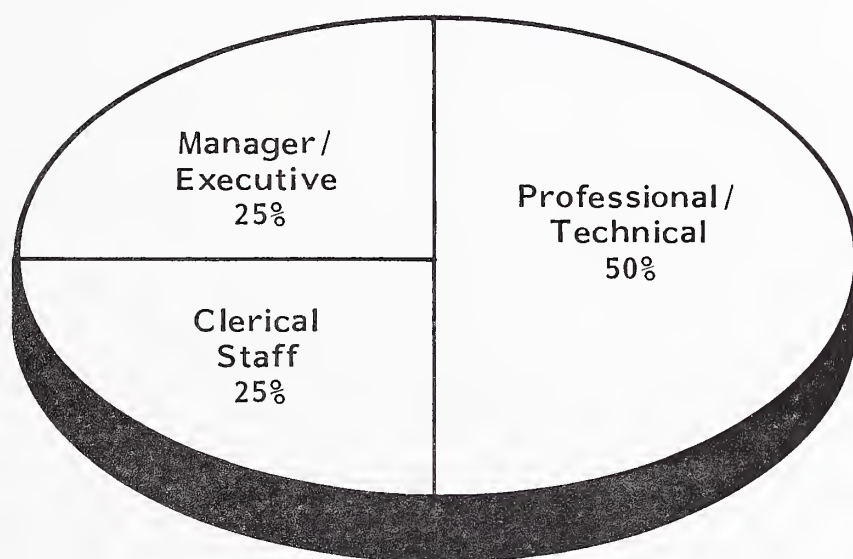
U.S. JOBS BY FIRM SIZE

NUMBER OF WORKERS IN FIRM	SHARE OF TOTAL U.S. EMPLOYMENT
1 - 19	14.3%
20 - 100	15.9
101 - 499	13.8
500 - 999	5.8
1,000 - 2,499	7.5
2,500 - 4,999	6.7
5,000 - 9,999	4.5
10,000 - 24,999	6.5
25,000+	25.0

Source: Dun's Business Month.

EXHIBIT III-21

WHO USES PCs IN FORTUNE 1000



Total Number of PCs: 900,000

Estimated Number of Users: 2,000,000

IV CHARACTERISTICS OF FORTUNE 1000 USERS AND BUYERS

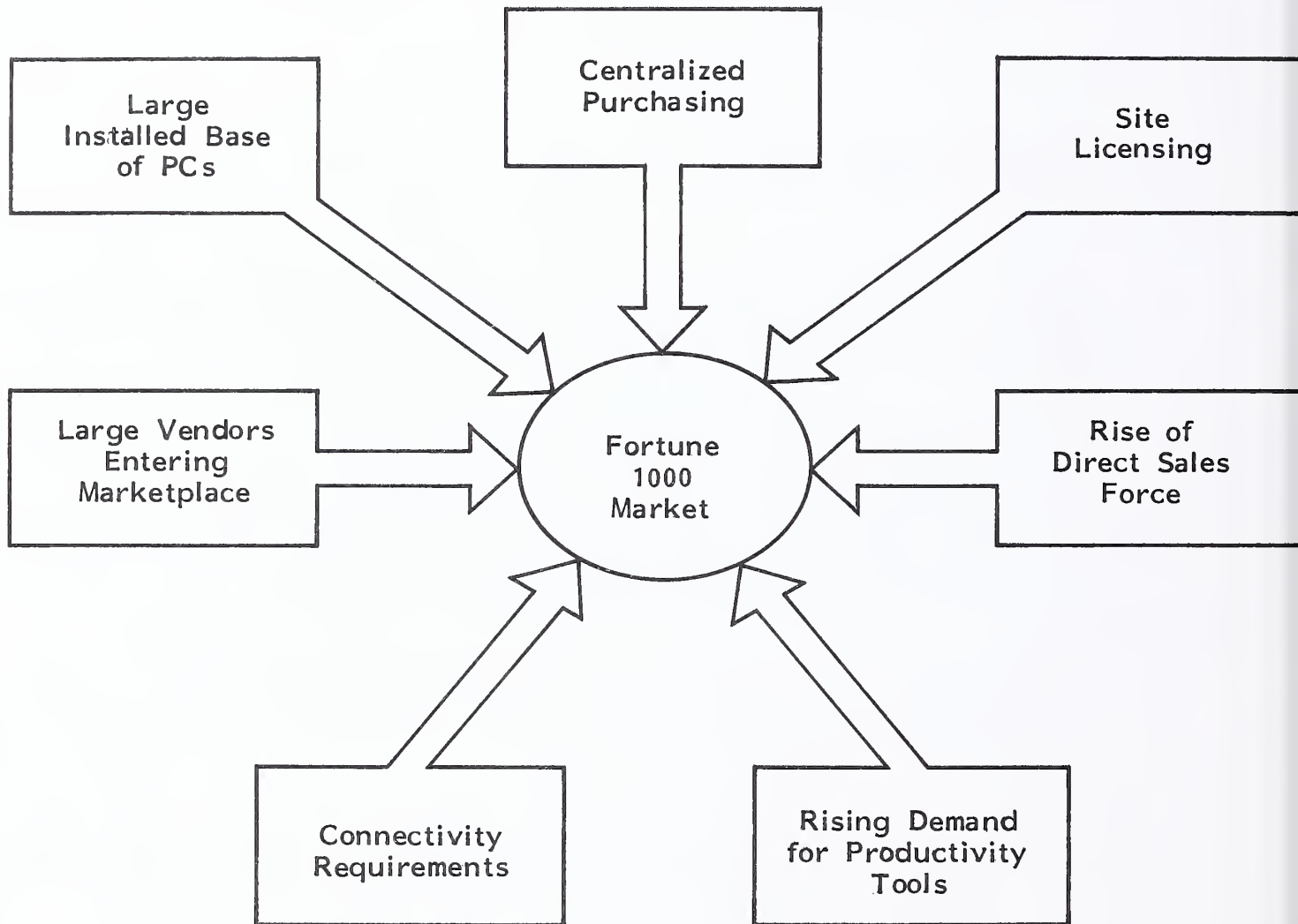
IV CHARACTERISTICS OF FORTUNE 1000 USERS AND BUYERS

A. INTRODUCTION

- Much of the software industry's hopes for breaking out of the current slump hinge on the large corporate market.
 - The personal computer industry and large corporations are firmly tied together. To survive, personal computer software vendors must attract corporate clients; in turn, large corporations must manage the use of microcomputers if they are to increase productivity.
- The large corporate market is still relatively new and emerging, with great opportunities for some vendors and numerous pitfalls for others.
 - Because of their huge size and resultant bureaucracies, selling to large corporations is much different than selling to individuals or small businesses.
 - However, many vendors do not know how to reach the corporate end user. They are unfamiliar with the labyrinthian information systems department. They do not know who to contact or where to start.
- The Fortune 1000 market is currently a dynamic one with numerous forces impacting it, as shown in Exhibit IV-1.

EXHIBIT IV-1

FACTORS INFLUENCING THE FORTUNE 1000 MARKET



- What is needed is an understanding of how microcomputers exist in the large companies, who influences buying, and what large business buyers want from their software vendor.
- The distinguishing features of the use of microcomputers in the Fortune 1000 are highlighted in Exhibit IV-2. While certainly some smaller companies have some of these attributes, only the largest companies have them all.
- The purchasing process changes dramatically when computing professionals are available within a company. There is an important distinction between business computer users and business computer professionals.
 - Users are interested in business solutions and tend to base their purchasing decisions on how well a particular product solves their business needs. Users are distinct from computing professionals in that they are involved with personal computers as tools for general business responsibilities.
 - Information systems people are interested in security, dependability, and how well the equipment fits into the existing computing environment.
 - Therefore, solution-oriented advertising is most effective with users, while feature-oriented advertising is still appropriate for computer professionals.
- Different attitudes have emerged regarding the use and importance of microcomputers in the Fortune 1000. The three prevailing attitudes are shown in Exhibit IV-3.
 - Restrictive companies maintain strict control over who gets computers, what they are used for, and what kinds of computers and software are authorized.

EXHIBIT IV-2

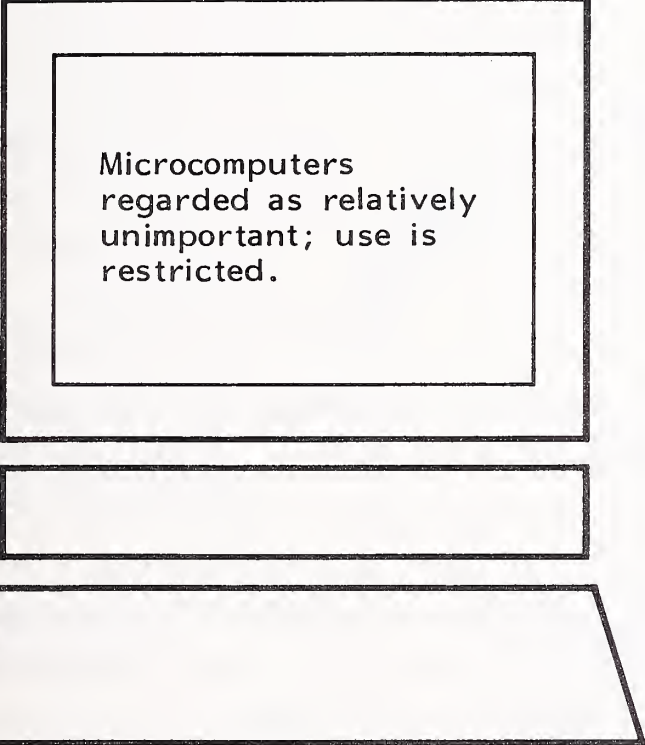
DISTINGUISHING FEATURES OF FORTUNE 1000 MICROCOMPUTER USE

- Large installed base of microcomputers
- Multiple PC sites
- Separate IS staff to handle microcomputers
- Users desire or have access to mainframe databases
- Ready access to external databases
- In-house turnkey solutions
- Custom PC software distributed to multiple sites

EXHIBIT IV-3

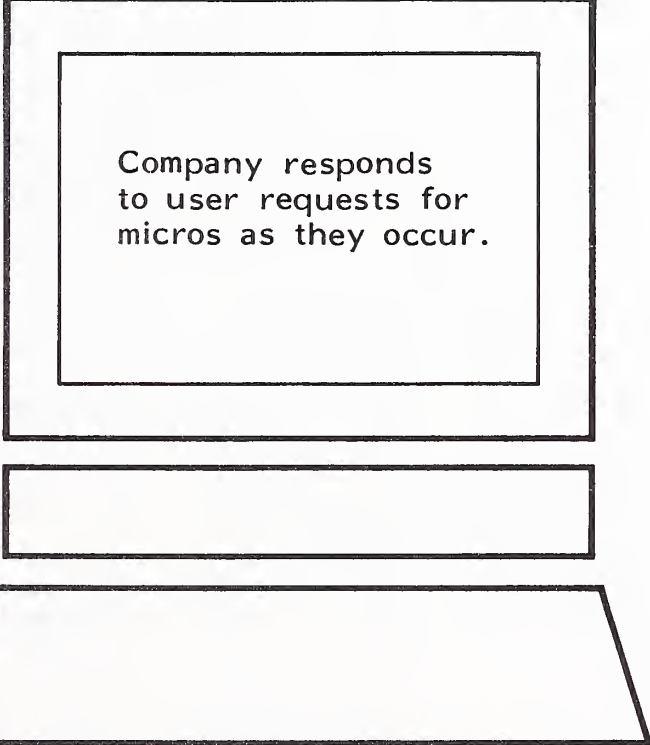
MAJOR ATTITUDES CONCERNING USE OF MICROCOMPUTERS IN FORTUNE 1000

RESTRICTIVE



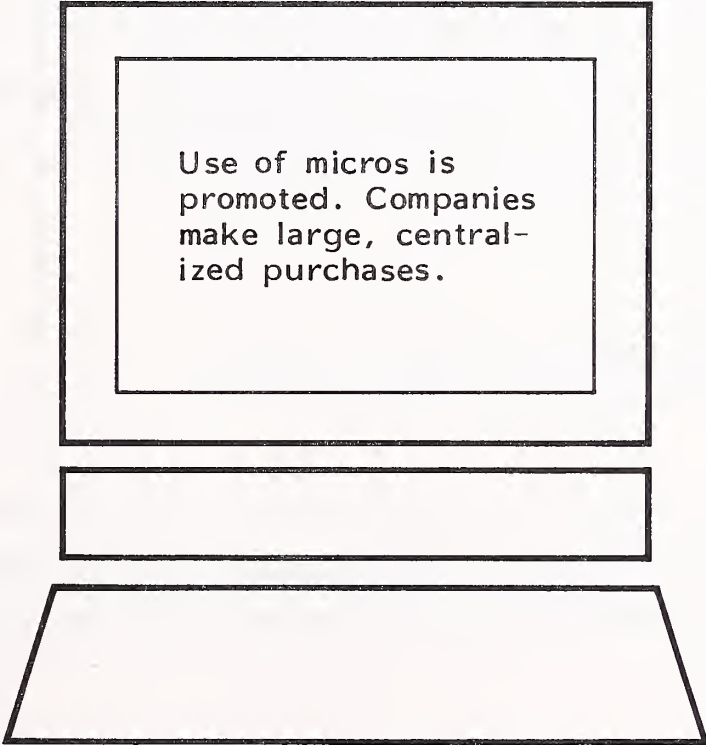
Microcomputers
regarded as relatively
unimportant; use is
restricted.

REACTIVE



Company responds
to user requests for
micros as they occur.

PROACTIVE



Use of micros is
promoted. Companies
make large, central-
ized purchases.

- Reactive companies let the individual users or departments decide whether they need personal computers and then provide support by offering training, evaluating new hardware and software, and recommending certain packages for an approved lists.
- Proactive companies are the ones actively spreading the use of personal computers. These companies are using computers as a strategy to get a competitive advantage. They are promoting user computing, installing micro-mainframe links, and holding open houses at the company's computer center to encourage people to buy them.
- In most Fortune 1000 companies, microcomputers are now an accepted part of the corporate environment. The stages of adoption of use of personal computers in the Fortune 1000 are shown in Exhibit IV-4. In the beginning, users bought personal computers for their own use. In many cases, the IS department did not even know about them. Now, many IS departments have moved to control the purchase and use of personal computers. In some cases it works, but in other companies the users can bury the request for personal computer hardware and software in the departmental budget. Consequently, very few IS departments know exactly how many personal computers are in their company. In the future, as corporations become more sophisticated in their microcomputer usage, software purchases will become more centralized, real communications solutions will be developed and implemented, and applications will be developed to take advantage of this to boost the productivity of groups of workers.

B. PROBLEMS SELLING TO FORTUNE 1000

- The major attraction of selling direct to Fortune 1000 companies and large institutions is the often immense volume of sales possible in a single order. There are trade-offs, however, which are listed in Exhibit IV-5.

PHASES IN USAGE OF MICROCOMPUTERS IN FORTUNE 1000

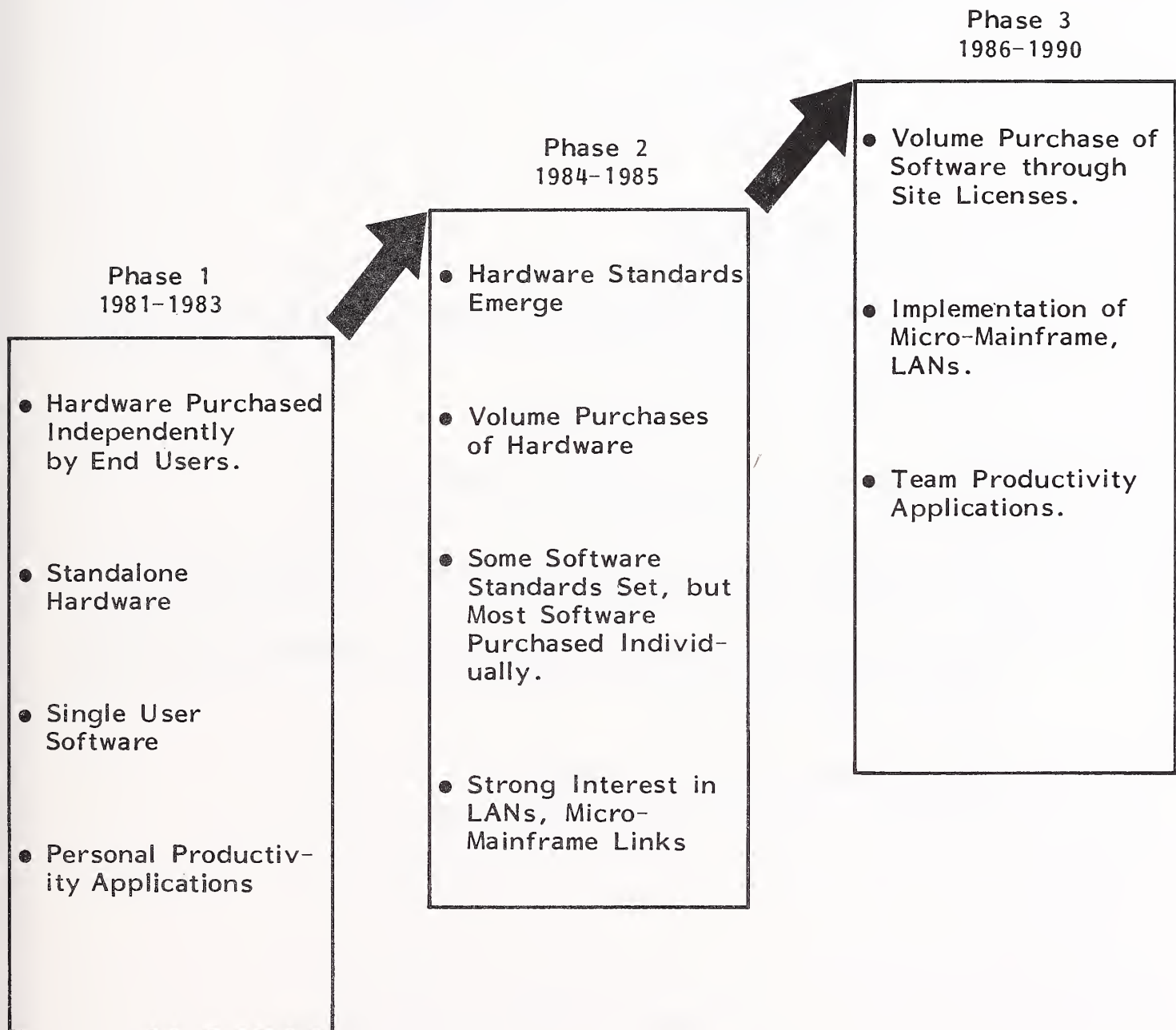


EXHIBIT IV-5


IMPEDIMENTS TO SELLING TO FORTUNE 1000

- Long selling cycle
- Difficult to identify person responsible for purchase
- Committee decision making
- Getting buyer's attention is difficult
- Companies are standardizing on a few products
- Conservative IS departments are often reluctant to adopt new products
- Direct sales force is costly

- It will become increasingly difficult to sell to the Fortune 1000 market as those companies come up with approved vendor lists and standardize on a couple of products for each category of software. Vendors may find themselves locked out. It will certainly be difficult to sell a "me too" product into this market even if it is cheaper. Large companies are willing to pay to get the "real" thing. A product released by a new vendor will have an especially difficult time since customers are looking for vendor stability.
- Committee decisionmaking, which is partly responsible for the long selling process, makes for a tougher sell. It becomes more difficult to identify and understand the decisionmaker since there is normally more than one.
- Getting the attention of the corporate buyer is very difficult for they are besieged by people trying to sell them a multitude of products: computer hardware, software, and peripherals. It is difficult to contact the right person and even more difficult to attract their interest. The problems IS managers face that make it difficult to get their attention are listed in Exhibit IV-6.
- IS departments are fairly conservative in their volume purchases. While large corporations have demonstrated a willingness to try new or innovative products on a limited basis, they are reluctant to adopt them on a wide scale until they have been thoroughly tested and tried.
- In some Fortune companies, there still is not one person or group in charge of buying software. Consequently, there is no infrastructure in place to buy in volume.
- The inevitability of a long sales cycle when selling to the Fortune 1000 is due to a number of factors:

EXHIBIT IV-6

PROBLEMS FACING CORPORATE I.S. DEPARTMENT BUYERS

- Inundated with demands from users
 - Flooded with calls from vendor's salespeople
 - Locating...
 - Evaluating...
 - Selecting...
 - Standardizing...
 - Supporting...
- 
- Application software

- Bureaucracy and red tape. There is a long seed time before a sale can be made. Buying software can be a lengthy process in large corporations. It takes an average of three to six months from the initial sales call to the signing of the contract in large corporations.
- Customers are becoming more sophisticated in their analyses and evaluations of applications software products.
- Increased competition in the marketplace is providing customers with more alternatives, thus increasing the time and data required to evaluate the contending vendors.
- Trends toward buying larger quantities of applications software products all at once are resulting in a longer decision process because more groups enter into the decision process.

C. IMPACT OF CENTRALIZED PURCHASES

I. TRENDS TOWARD CENTRALIZATION OF PURCHASING IN FORTUNE 1000

- To bring order to the chaos that is the micro software market, most major corporations have established centralized purchasing of microcomputer hardware and software. The IS department is trying to bring the proliferation of microcomputer hardware and software under central control.
- Approximately 85% of the companies in the Fortune 1000 have established such practices for the purchase of hardware. The purchase of software is less stringently controlled.

- Centralization is one way to overcome the purchase of random, unsupported software whose prices fall within the approval level of managers.
 - Centralization is a natural outgrowth of a corporation's desire to get volume discounts and standardize on products.
 - Standardizing on one computer brand and a handful of software titles greatly simplifies buying, training, and support.
 - IS managers want to standardize on certain software and hardware to make sure everything can be connected via network at a later date.
- Users, on the other hand, want freedom of choice. Software purchases will never be completely centralized or standardized; it is too easy for an end user to buy a package at a local retailer. There will be a constant battle between the IS department and the end users, a conflict between control and flexibility.
- While there is a trend toward centralization, the policy stops short of saying what end users have to buy, as many PC hardware policies do. Rather, many companies are drifting toward centralization. IS is not mandating control, but instead is developing recommendations or influencing decisions.
 - IS departments will exert pressure by establishing approved vendor lists. End users can disregard this list if they choose, but they will just have to find support on their own.
 - Micro-mainframe connections will undoubtedly be centrally controlled because the IS department will continue to control mainframe access.

- Generic office automation or business productivity tools are amenable to central purchasing, but vertical market packages are not. For these, the vendor still has to identify the right department and the right person within that department.

2. IMPACT OF CENTRALIZATION

- The centralization of software purchasing by Fortune 1000 companies is having a dramatic impact on the software industry. Because companies with large installed bases of personal computers can buy thousands of copies at a single time, vendors are scrambling to satisfy those companies' needs. Thus, large corporate buyers have the power to influence the way software is sold.
 - Since the IS department plays such an active role in the acquisition of PC software, it's not surprising that the leading micro software vendors target their direct sales efforts and national account marketing programs to software professionals in corporate America.
- Corporations today are in a position to demand greater flexibility in product and price options from software vendors. Large users carry a great deal of clout in the procurement process. In fact, as the Fortune 1000 begin to act as a unit, they will flex their combined purchasing power muscle and will be able to enact changes. These changes include:
 - In 1985, numerous vendors announced the removal of copy protection and the offering of site licenses and volume discounts. This was in response to the desires of corporate users.
 - Purchasing patterns will become much more conservative as IS departments issue regulations governing software acquisitions.
 - Increased standardization will force greater compatibility between products from different vendors. For example, file formats will become more standardized.

- More contact with vendors will result because large corporate users who have made a substantial investment in a certain product will want to work with the vendor on product enhancement plans in order to protect their investment.
- Training and support will improve. Large corporate users will not pay for training and support unless it is of a sufficiently high quality. Otherwise they will provide it themselves.
- The Micro Manager's Association (MMA), a group of managers who make purchasing decisions at Fortune 1000 companies, has emerged as a very influential group that is currently working on these issues.

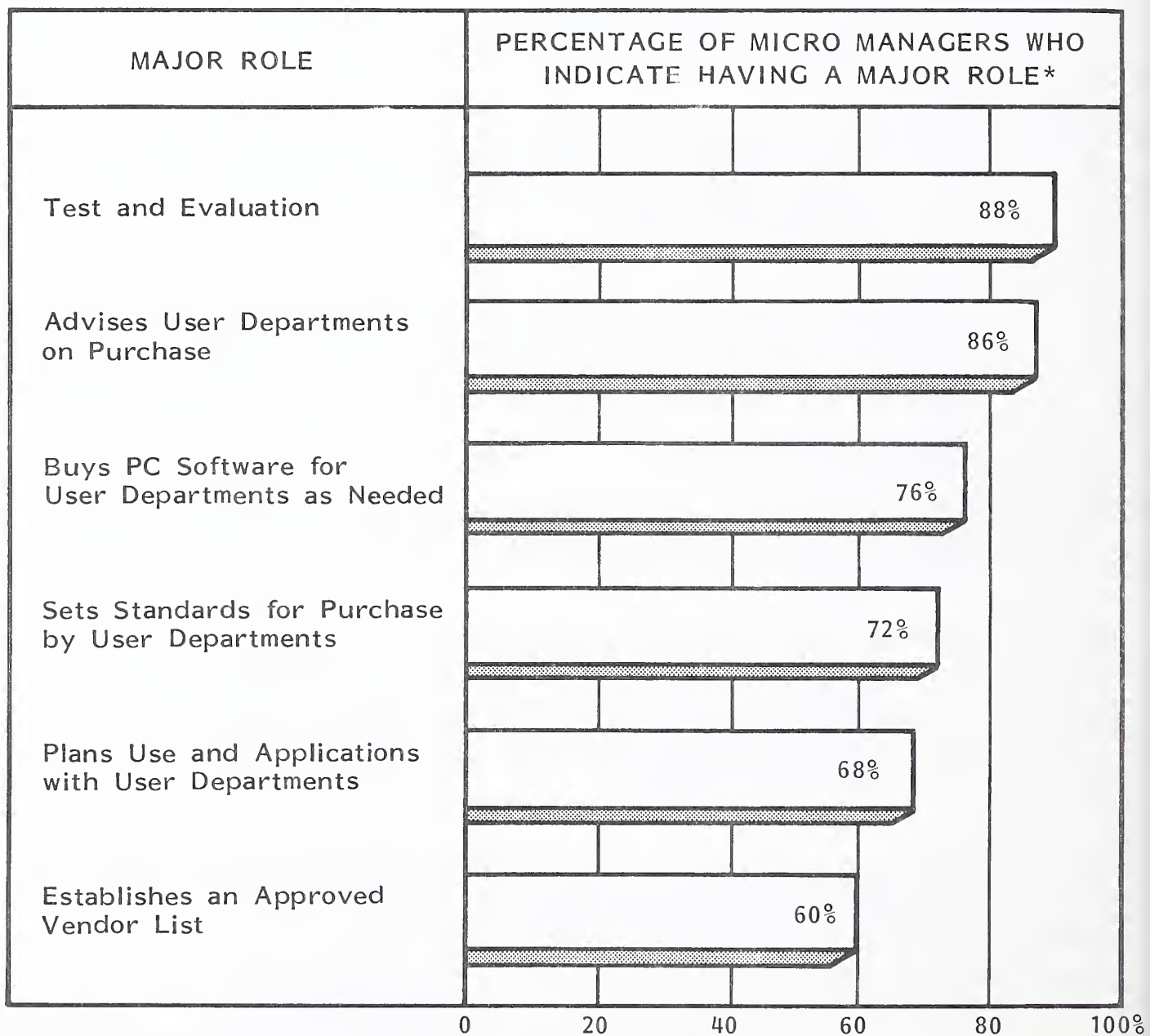
D. DECISION PROCESSES

- Until the past couple of years, most corporations had no formal strategy or policies governing PC hardware and software purchases. Products simply arrived through the back door, brought into the company by individual users.
- In a small business, top management is involved in the purchase decision to a large degree. However, in a large business, top management is seldom involved with personal computer hardware or software purchases. The large business has in-house computing professionals to determine computer needs.
- The IS department had little to do with the initial infiltration of PCs into large corporations. Now that PCs are being tied into mainframes, the IS department is taking over the purchasing decision of personal computer hardware.

- Microcomputer managers are a relatively new factor in the buying process.
- The buying influences for microcomputers vary widely from company to company. Some companies have rigid centralized purchasing, vendor qualification, and software standards. Others leave the purchase decision to the application user with or without IS guidance.
 - The most popular method is to have a PC Coordinator or Micro Manager in charge of evaluating and selecting software and hardware.
 - Some companies have gone so far as to create a separate microcomputer department that may operate a company store, microcenter, or information center.
- There is no question that the IS departments are playing a major role in the purchase of personal computer products for large businesses. The various aspects of the IS department's role in purchasing microcomputer software are shown in Exhibit IV-7.
- Product selection and product purchasing have become distinctly separate steps, as shown in Exhibit IV-8.
 - The person doing the selecting in the corporation is not always the person doing the actual buying. When the purchaser negotiates a purchase after the product has been selected, the primary concerns are price and availability.
- There are usually several people within a corporation who influence microcomputer software purchasing decisions.
 - In interviews with micro managers, the IS department was cited as the major contributor to the purchase decision for microcomputer software by a slight margin, as shown in Exhibit IV-9.

EXHIBIT IV-7

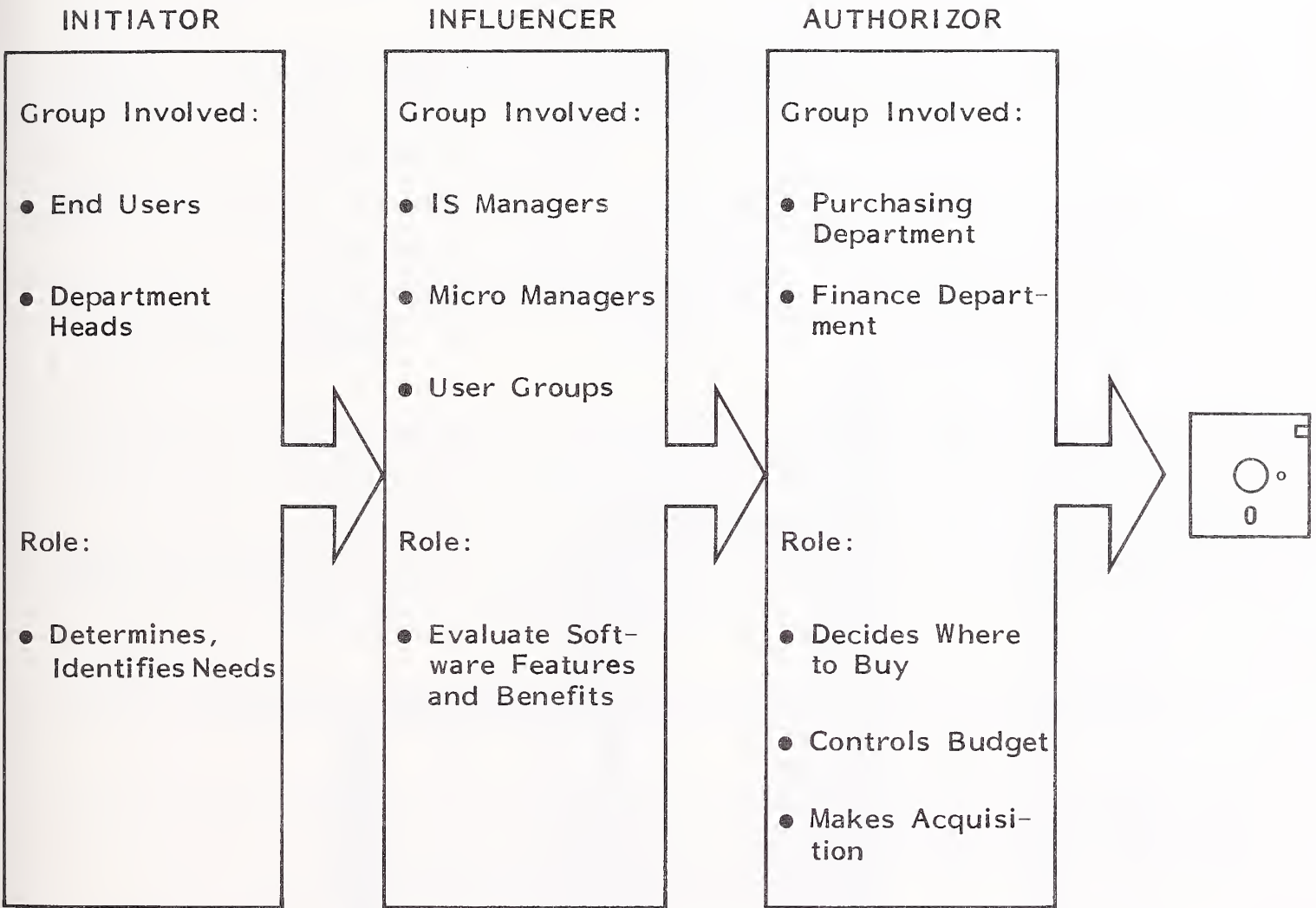
ROLE OF I.S. DEPARTMENT IN PURCHASING MICROCOMPUTER SOFTWARE



* With a rating of 7 or higher on a scale of 1 - 10

EXHIBIT IV-8

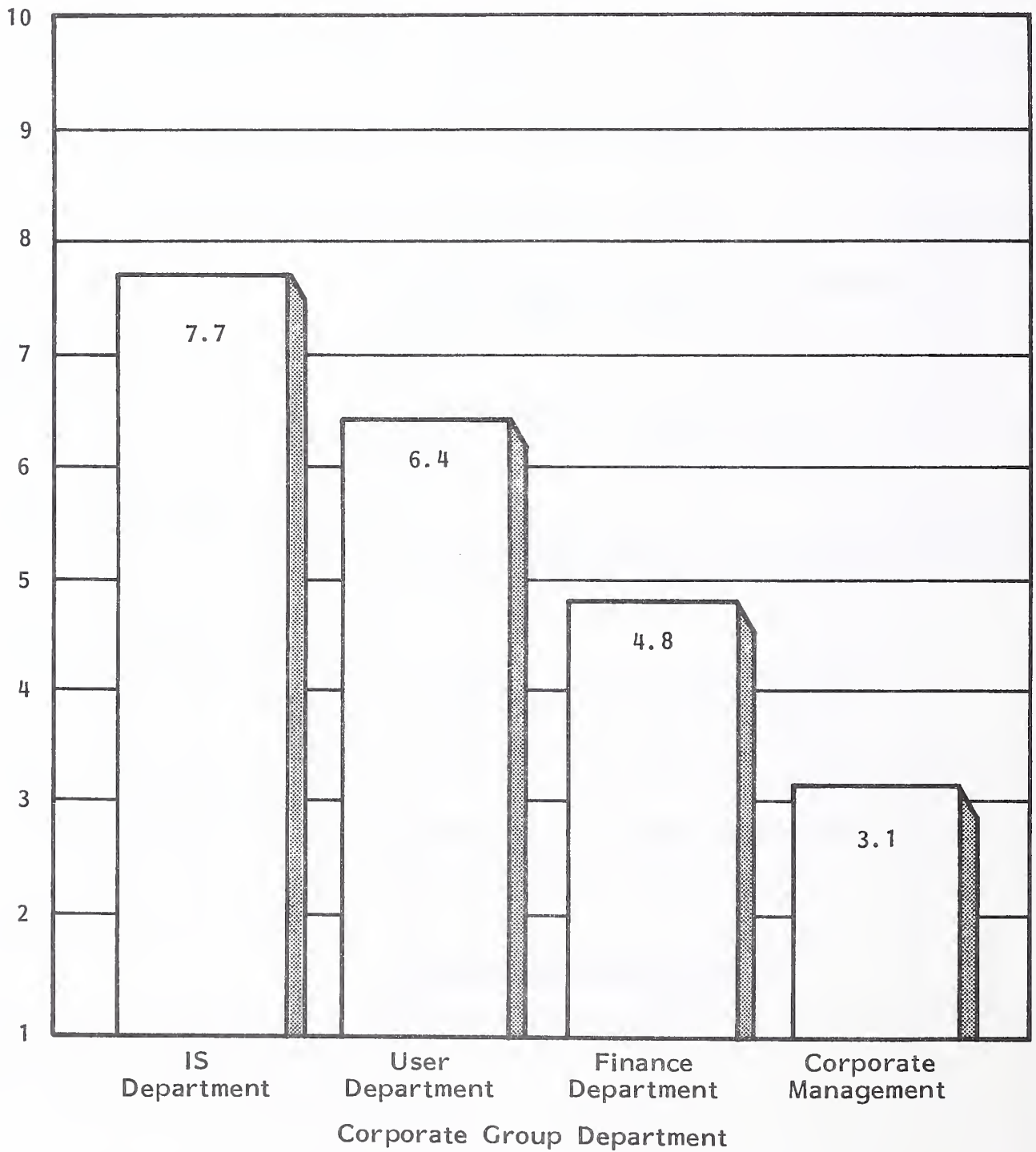
DIFFERENCE BETWEEN WHO SELECTS AND WHO PURCHASES SOFTWARE



Must take into account multiple levels of decisionmaking in Fortune 1000.

EXHIBIT IV-9

LEVELS OF INFLUENCE IN PURCHASING PERSONAL COMPUTER SOFTWARE MICRO MANAGERS' VIEWS

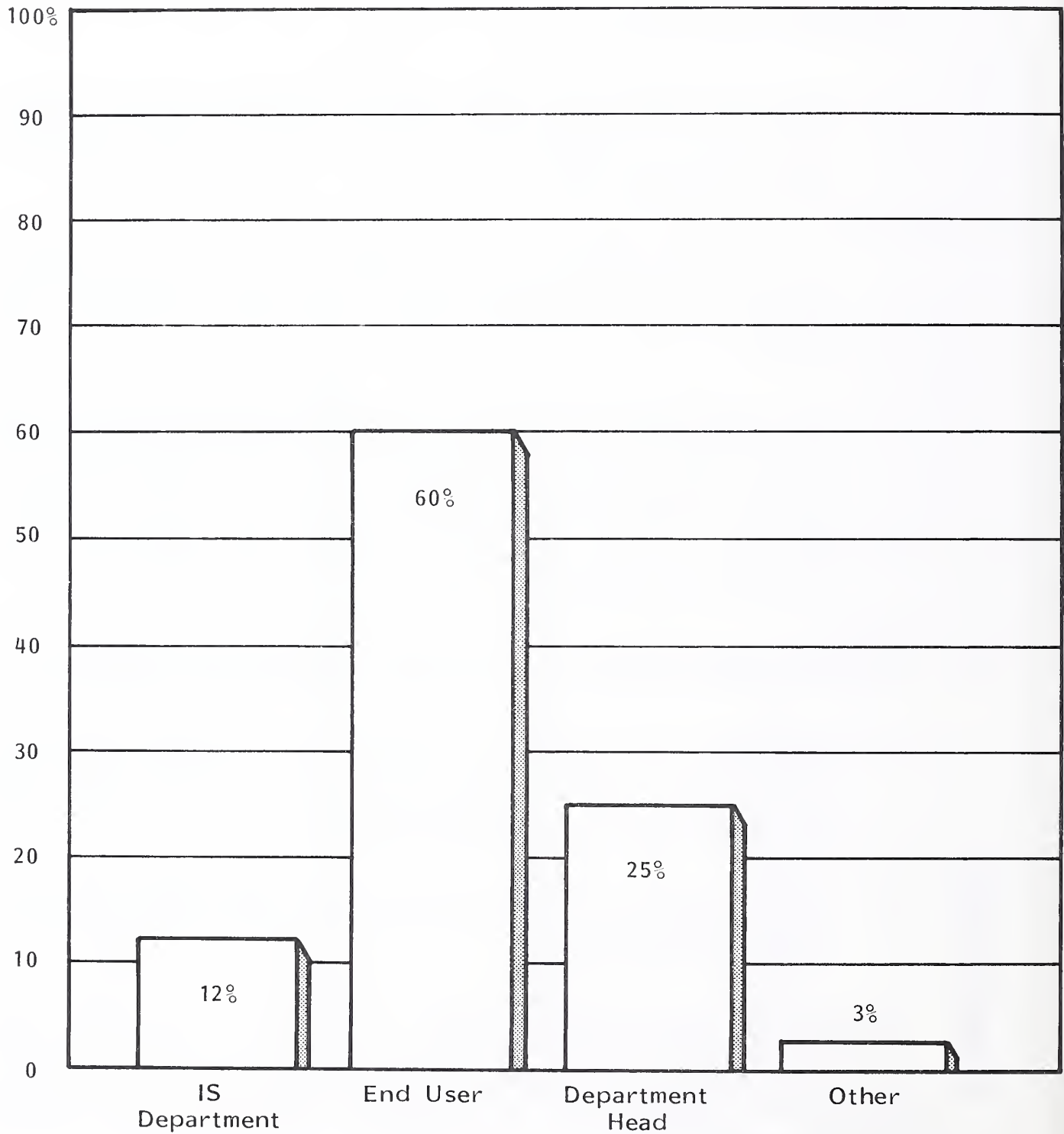


Rating: 1 = Lowest, 10 = Highest

- However, according to the end user interviews, the users claimed to have the greater influence by a wide margin, as shown in Exhibit IV-10.
- Based on these results, it seems clear that both groups are significantly involved in the purchase decision.
 - Users are generally the people who begin the purchase by specifying a need, and the purchase of a particular product is rarely concluded without the user's input.
 - In the largest corporations, the IS department is a key decisionmaker although end users continue to play a major role in making the final choice.
 - The importance of the IS staff is not surprising considering that many business users are not experienced enough or do not have the time to evaluate numerous software packages. They seek out the IS department as a valuable resource. However, the importance of the individual user cannot be ignored.
- It is often advantageous to start at the top by targetting the IS department.
 - Being able to sell to just the IS department can drastically reduce the selling effort necessary because only one group has to be sold rather than a large number of separate end users.
 - The IS department is normally the group responsible for making volume purchase agreements.
- However, a successful strategy cannot overlook either the IS staff or the corporate end users. The direct sales force must be able to sell both the IS staff and the corporate user on the qualities of both the product and the vendor company.

EXHIBIT IV-10

WHO END USERS BELIEVE DECIDES ON SOFTWARE PURCHASES



Question: Who Decides what software packages you as an end user gets to use.

- Who to target initially depends on how the company has set up their decision-making process.
 - Since the decisionmaker can vary depending on the company, vendors must be flexible and know the clients to determine who the decision-makers are.
- Some corporations have two lists of microcomputer products used within the company: a supported list and an approved list. Supported products are ones in which the customer's in-house staff provides users with active day-to-day support such as training and a user hotline. The approved list includes products that are known to be of high quality but are not actively supported by the technical staff.
 - In order for a vendor to get a product on the approved or supported list, the product must be innovative, new, or substantially better than existing products.
 - Vendors must realize that corporations have made a tremendous investment in training and support for products like Lotus 1-2-3 and the customer is not going to throw that investment away for something only marginally better. To justify retraining users on another package, the package must allow users to work faster, thus raising productivity.
 - While getting on an approved vendor list helps a vendor a great deal, vendors should realize that users can still buy whatever package they want. Departments can avoid the policy and choose what they want, they will just not get support from the IS department.
 - Consequently, even though IS departments in many companies have created standards for software, there is a large amount of unauthorized purchasing of software going on that may not correspond to existing standards.

- Now that the personal computer has become a critical part of the operations of large companies, companies have become much more conservative in their purchasing patterns. They no longer try to pinch pennies and buy cheaper, alternative products; rather, they buy products of high quality that they know will do the job.

E. ROLE OF IS DEPARTMENTS

- IS departments are not necessarily experts on microcomputers. Most are struggling to keep up with the vast number of products available and with changing technology.
 - The top concerns of micro managers are listed in Exhibit IV-11.
- Rather than force unwanted software on independent-minded users, many IS departments will serve as advisors or consultants to the user. Many users look to the IS department to:
 - Supply the hardware.
 - Supply the applications programs.
 - Take care of all maintenance.
 - Provide a spare system in case of major failure.
 - Train the user.
 - Evaluate competitive products.

EXHIBIT IV-11

TOP CONCERNS OF MICRO MANAGERS

- Copy protection
- Site Licensing
- Upgrade policies
- Documentation
- Communication standards
- Vendor Support
- User participation in the product development process

- In addition, the IS department will sometimes customize standard packages or write applications if a department is willing to pay for it.
- End users will always seek the product that best meets their needs. They will resist top-down control, but will welcome top-down guidance and support.
 - End users and IS departments often have conflicting needs when purchasing and using microcomputer software. These differences are illustrated in Exhibit IV-12.

EXHIBIT IV-12

I.S. DEPARTMENT VERSUS END-USER NEEDS FOR MICROCOMPUTER SOFTWARE

I.S. DEPARTMENT

- Fits into Existing Computer Environment
- Ease of Training
- Standardization of Software Used
- Protect Mainframe Access

END USER

- Provides Solutions to Business Problems
- Ease of Use
- Flexibility in Choosing Software Used
- Obtain Mainframe Access

V RATINGS OF SELECTION CRITERIA

V RATINGS OF SELECTION CRITERIA

- To determine the relative importance of the criteria that are involved in the purchasing decision, three groups were interviewed: vendors, micro managers, and end users.
 - A tabulation of their responses is shown in Exhibits V-1, V-2, and V-3.
 - Somewhat surprisingly, the vendor, micro manager, and end-user ratings of the selection criteria are very much in line with each other. There were no major discrepancies.
- Price is not important for just one or two copies. Price becomes important once a company establishes a standard. When initially evaluating a product, it is a low criterion. After a commitment has been made to a product, then it is very important.
 - For sophisticated corporate users with the resources to handle support and training in-house, price becomes a more important consideration.
 - As users become experienced, they do not need dealer support (when buying their 100th copy of Lotus, for example); thus, they begin to buy on the basis of price.
 - In many quantity purchases, what is important to the buyer is the discount, not the price, because the discount makes purchasers look good to their bosses.

EXHIBIT V-1

MICROCOMPUTER SOFTWARE VENDORS' RATINGS OF THE FACTORS CONSIDERED MOST IMPORTANT BY CUSTOMERS

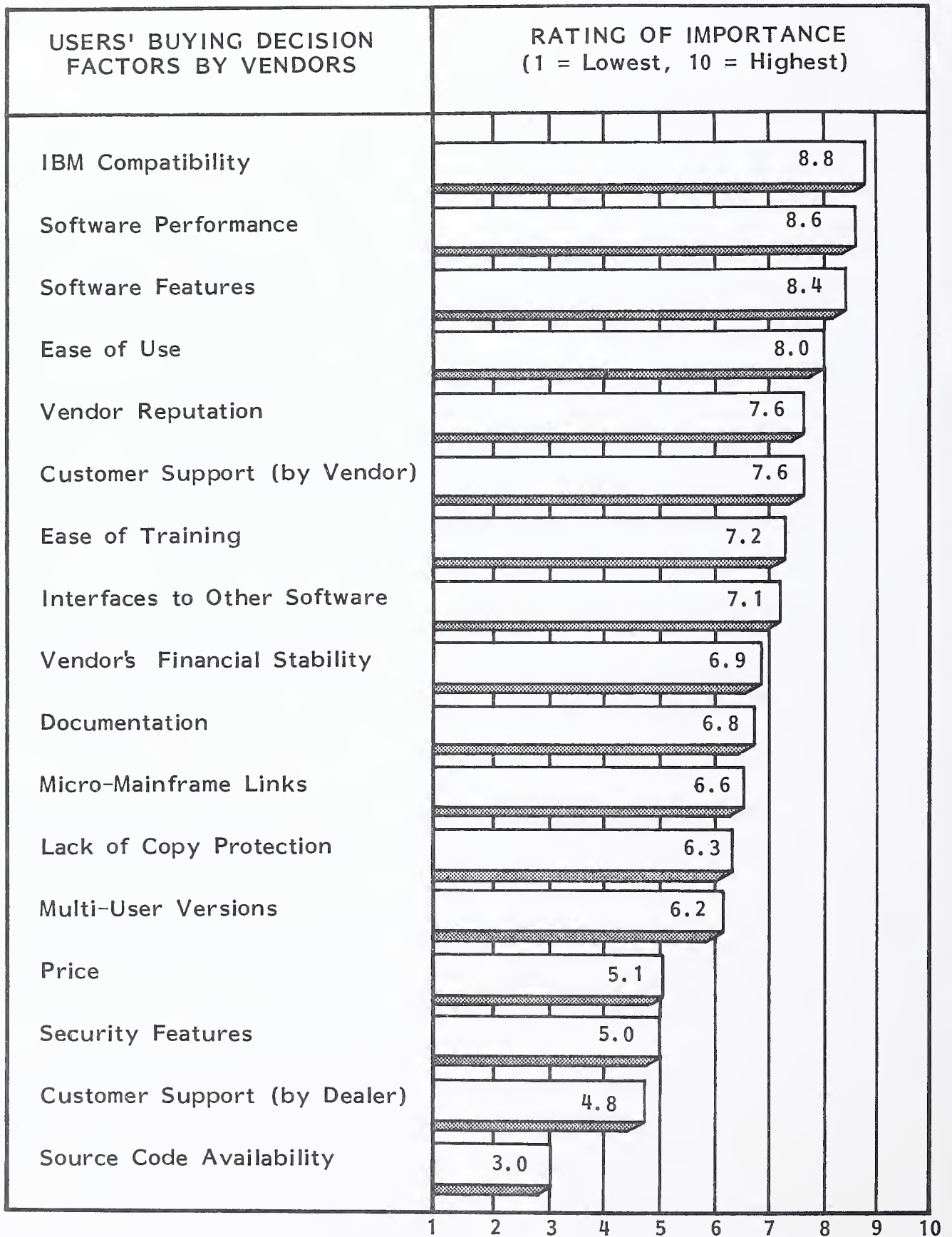


EXHIBIT V-2

I.S. MANAGERS' RATINGS OF THE FACTORS CONSIDERED MOST IMPORTANT IN BUYING SOFTWARE

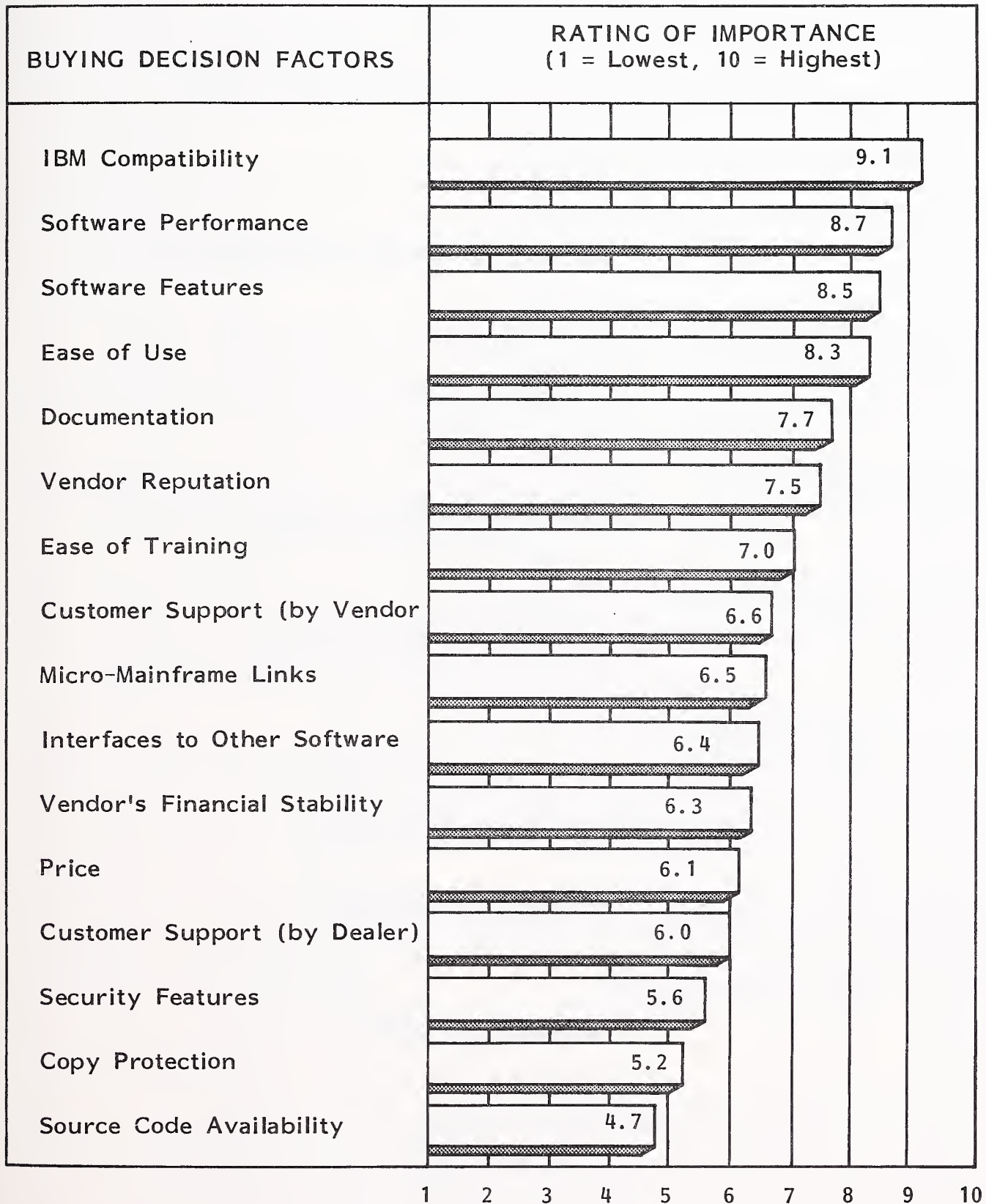
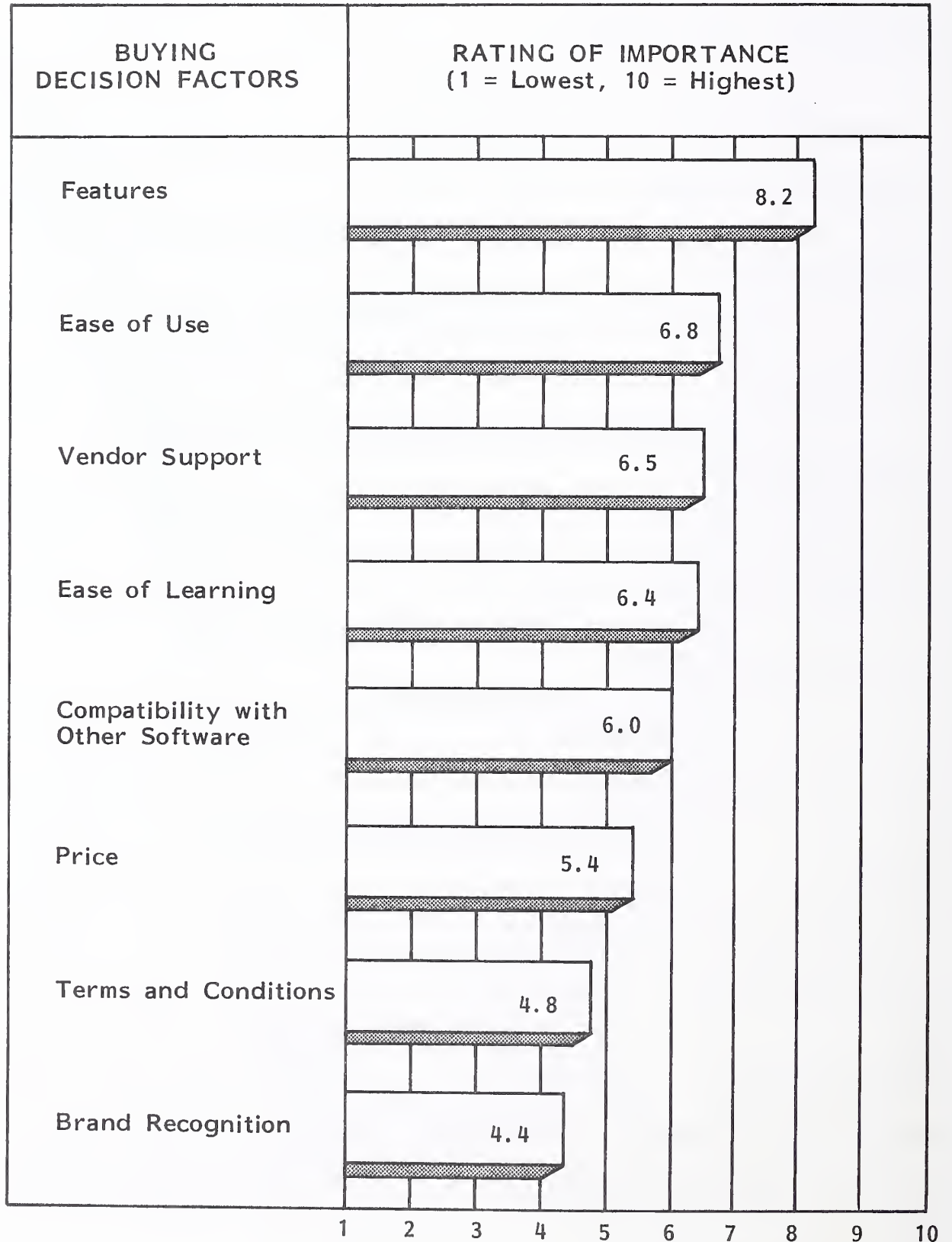


EXHIBIT V-3

END-USERS' RATINGS OF THE FACTORS CONSIDERED MOST IMPORTANT IN BUYING SOFTWARE



- Customers in the Fortune 1000 getting a high-end product with a large amount of productivity benefits are willing to pay a high price because they will benefit from the full functionality.

- Vendor Reputation is important. The more software a company buys, the more important is vendor reputation. Once a company makes a sizeable investment in a software package, they are also making an investment in the vendor.

- Software Features are important because capabilities need to meet applications requirements.

- Ease of Use depends on which segment of the market you are selling to. There are some very sophisticated users in large corporations who will use the more complex products, but the majority of users require ease of use.

- Ease of Training is an important consideration for micro managers because many companies are doing their own training of end users.

- Interfaces to Other Software are necessary. Lotus 1-2-3 is the only product with the critical mass to have an impact. You have to live in the environment, and Lotus is the environment in large companies.

- Documentation is still important to some. Although the consensus seems to be that since everyone's documentation is bad it's not an important factor, some people are starting to insist on better documentation.

- There is an inverse relationship between support and documentation. The higher the level of support provided, the less important is documentation.

- Security Features are not important yet because only single-user packages are commonplace today.
- Source Code Availability is generally only important if a company goes out of business. Most customers are only interested in source code if they think the vendor will not survive; however, some customers want to be able to customize the programs for their own particular applications and so require the source code.
- Lack of Copy Protection is becoming a big issue. Most copy protection schemes hinder operation on a hard disk which is a significant problem in the Fortune 1000 where there are a sizeable number of hard disk-based computers.
 - The impact on sales depends on the product. Copy protection doesn't seem to hurt Lotus 1-2-3, but Wordstar 2000 sales were hurt by a cumbersome copy protection scheme.
- The selection criteria which will increase in importance over time, as indicated by numerous vendors, micro managers, and end users, are listed in Exhibit V-4.

EXHIBIT V-4

SOFTWARE BUYING DECISION CRITERIA WHICH WILL INCREASE IN IMPORTANCE

- LAN versions available
- Site licensing availability
- Micro-mainframe link availability
- Copy protection removal
- Ability to interface with other software
- Security features available

VI PRICING AND DISTRIBUTION STRATEGIES

VI PRICING AND DISTRIBUTION STRATEGIES

A. SITE LICENSING

I. INTRODUCTION

- Site licensing is one of the major issues related to microcomputer use in large corporations. However, throughout much of the industry and user community, there is a lack of understanding of what is a site license and what is the best way to implement it.
- Many companies have recently instituted site licensing policies. Almost everyone in the business is considering it, but few have actually completed the process.
- The packages most likely to be site licensed are word processing, data base management systems (DBMS), spreadsheets, and integrated software. These products have broad appeal and are often purchased in volume.
- Seeking a competitive edge, many software vendors targeting the Fortune 1000 are offering site licensing agreements.
- Second and third tier vendors of microcomputer software have been the most active in promoting site licensing agreements since they realize they cannot get market share through traditional retail channels.

- The degree of success these smaller companies have will help determine whether site licensing becomes an industry-wide trend. If the smaller companies are successful, it will force the major vendors to respond in kind.
- Many vendors hope site licensing will serve as a springboard not only into the Fortune 1000 but into other size businesses as well because where the big accounts go, the smaller accounts follow.
- Large microcomputer software companies fear that they would disrupt their existing distribution channels and pricing structures if they offered site licenses.
 - Many major software publishers will resist site licensing and will instead offer volume discounts to corporate users. This will allow them to retain control over the number of copies made.
- Most of the major microcomputer software vendors will not offer true site licenses until:
 - They are forced to by their users.
 - Competitors are able to take away sales by offering site licenses.
- Attitudes toward site licensing on the part of vendors will change dramatically once Lotus adopts a site licensing policy.

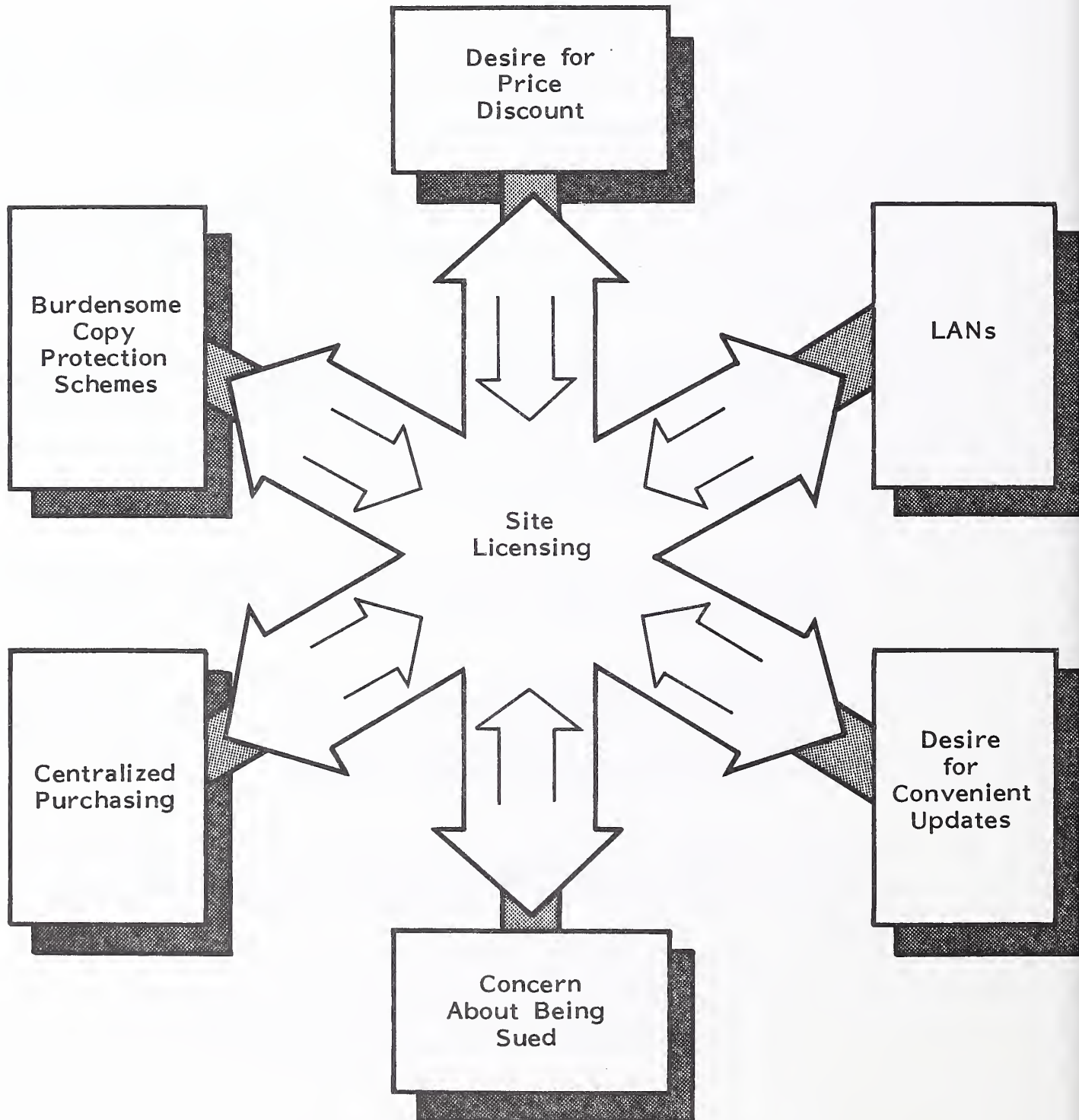
2. DRIVING FORCE OF SITE LICENSING

- Although a majority of customers currently desiring site licenses actually want volume discounts, there is a vocal minority of sophisticated users that have other legitimate reasons for wanting a site license.

- The factors spurring demand for site licensing are shown in Exhibit VI-1.
 - When a large company buys a piece of software, it does not want 500 separate licensing agreements. With a site license they get one agreement.
 - The growth of LANs will increase the demand for site licensing. Site licensing appears to be the only rational way to price software that will be used by 10-50 people on a network.
 - Sellers of mainframe and minicomputer software have offered site licensing for years, so now IS managers expect microcomputer software vendors to do the same.
 - Customers support site licensing to eliminate possible lawsuits against the company from vendors charging software piracy. Some forms of site licenses will eliminate the need for the IS departments to worry about illegal copying of software.
 - A site licensing scheme that allows for the removal of copy protection will allow programs to be installed on hard disks more conveniently.
 - Users want the freedom not to track individual copies of the program and not to purchase additional copies whenever a new PC is acquired, since many large companies acquire PCs daily.
- Corporate computer managers, through groups like the Microcomputer Managers Association, have been demanding that software vendors create site licenses.

EXHIBIT VI-1

FACTORS SPURRING DEMAND FOR SITE LICENSING



- The Microcomputer Managers Association of New York strongly endorses the site licensing approach.
- The recent spate of site licensing plan announcements among prominent PC software vendors was not because vendors wanted to do it, but because many large corporate users were demanding it.
- A comparison of vendor's perceptions of their customer's need for site licensing versus what corporate customers indicate to be the degree of importance they attach to site licensing shows that there is a fair amount of agreement. Based on the interviews, vendors rate it as an average of 6.3 on a scale of 1-10, while customers rate it as an average of 7.
- Currently, companies are merely asking for, not demanding, site licensing. Soon, however, they will demand it.
- Although there are some large corporate users that have been very vocal in their insistence on being able to buy software through a site license, most users at present are not rushing out to buy products with site licenses. Rather, they are taking their time, first, to evaluate which package to standardize on, and second, to sort through all of the different site license terms and conditions to determine which are the most appropriate.

3. STRUCTURE OF SITE LICENSES

- The advantages and disadvantages to site licensing for vendors are shown in Exhibit VI-2.
- The three main types of site licenses offered are described in Exhibit VI-3.
- What large corporate users value in a site license, based on interviews completed, is depicted in Exhibit VI-4.

EXHIBIT VI-2

ADVANTAGES AND DISADVANTAGES TO SITE LICENSING FOR VENDORS

ADVANTAGES
<ul style="list-style-type: none">● Encourages a Volume Sale● Pacifies Users● Makes it Easier to Provide Updates● Ensures Standardization on Vendor's Product(s)● Allays Piracy Fears● Reduces Marketing Costs● Lowers Cost of Providing Support● Allows Vendor to "get foot in the door"
DISADVANTAGES
<ul style="list-style-type: none">● Difficult to Keep Dealers Happy● Squeezes Margins● Can Be Difficult to Administer

TYPES OF SITE LICENSES OFFERED

VOLUME PURCHASE AGREEMENT

DESCRIPTION	COMMENTS
Gives the customer discount prices and a special delivery schedule.	<ul style="list-style-type: none"> - What is important is the <u>discount</u>, not the price. - Many large companies feel they should get a break on price since they do most of their own training and support.

LIMITED SITE LICENSE

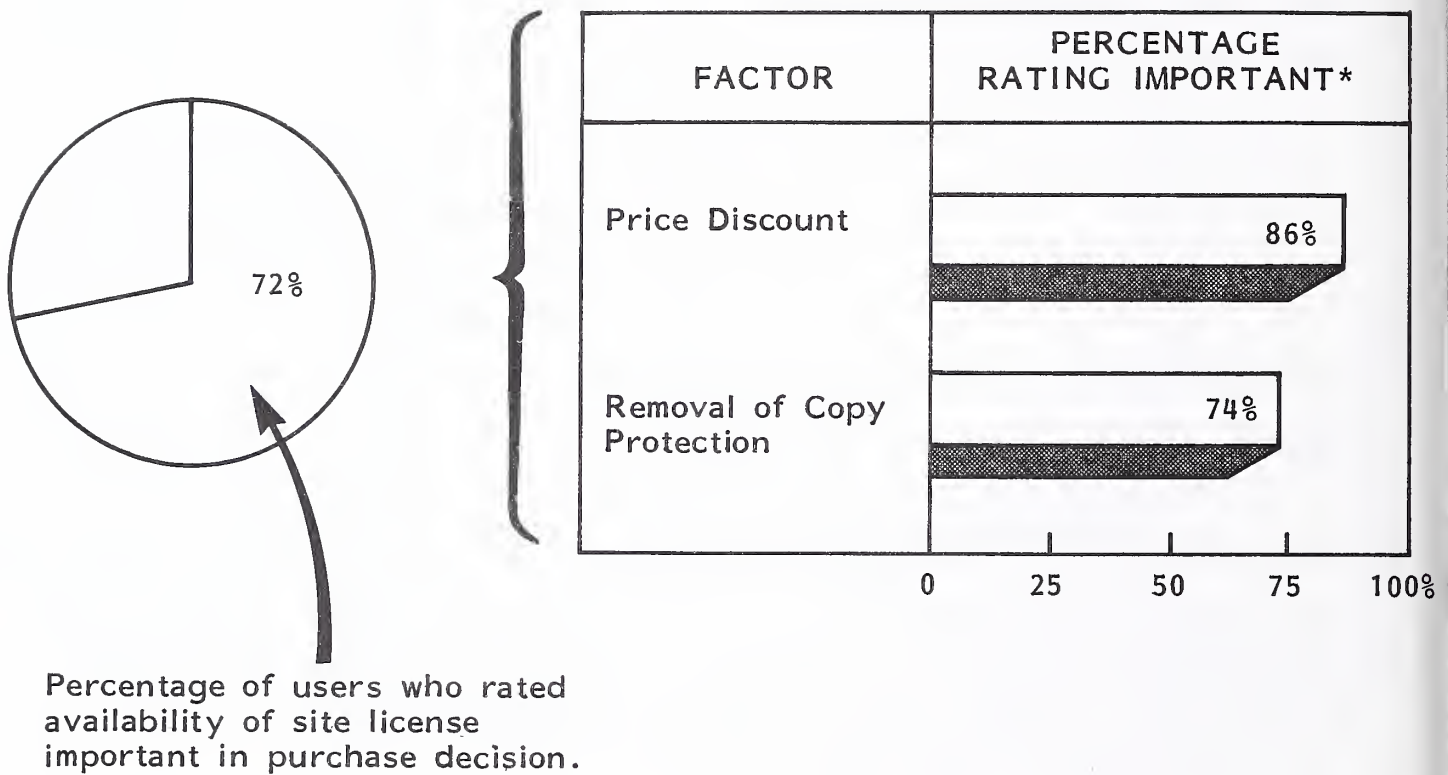
DESCRIPTION	COMMENTS
Allows users to duplicate only a fixed number of copies of a program, sometimes for a limited period of time. Users have option to make their own copies.	<ul style="list-style-type: none"> - Gives the vendor a large vested interest in continuing to keep customers happy. - This approach is recommended.

UNLIMITED SITE LICENSE

DESCRIPTION	COMMENTS
Allows users to make as many copies of a program as they desire for a particular site.	<ul style="list-style-type: none"> - Not recommended. - Rarely found. - This type of arrangement can be made as simple as possible. - Reduces threat of litigation.

EXHIBIT VI-4

WHAT USERS VALUE IN A SITE LICENSE



*Rating of 7 or higher on a scale of 1 to 10.

- The various site licensing schemes now available range from thinly disguised volume purchase agreements to truly unique arrangements.
- Vendors' approaches to site licenses vary. Innovative Software is selling solely through retailers, Multimate sells site licenses through its direct sales and through authorized resellers, and Summa bypasses the retail channel almost entirely.
- It appears that today most vendors are negotiating site licensing deals on a company by company basis rather than having one standard offering.
- The most appropriate site licensing approach for a particular vendor depends on the competitive position of the vendor as well as the particular needs of the customer. There is no single best approach.
- Until recently, the few software companies offering site licenses sold the licenses themselves and did not bother going through retailers. That is changing, however. The new wave of site licensers want the support of retailers. They do not want to alienate their dealers.
- Recommendations for structuring site licensing plans are listed in Exhibit VI-5. Additional recommendations include:
 - Should be for at least 50 copies, otherwise both seller and buyer are better off with the purchase being completed at the local dealer.
 - Charge for support, but must offer high value in the form of a special "corporate support" plan.
 - Do not offer unlimited copying unless you are desperate. Offering unlimited copying is committing economic suicide. You want to maintain a relationship. You want the customer to have an incentive to come back later and buy more programs from you.

EXHIBIT VI-5

RECOMMENDATIONS FOR STRUCTURING SITE LICENSES

- Offer different types of agreements, because user needs differ.
- Structure plan so that customers are encouraged to buy more as they buy more computers.
- Charge separately for support.
 - Provide licence with priority support.
 - Designate one person or group in the user organization to serve as a go-between for user and vendor.
 - Charge more if the customer wants more users to be able to receive support directly from the company.
- Charge an annual fee for upgrades and maintenance.
- Vendors who depend on dealers for a large percentage of their business must give dealers a commission on every site license.
- Vendors less dependent on dealers should give them a commission only if the dealer provides a reference that leads to a site license.

- Some large companies are prepared to do their own reproduction of documentation and diskettes; others are not. Charge extra if the vendor needs to duplicate and distribute software and documentation.
- Most publishers are worried about offending dealers by cutting them out of the site license procedure. Most microcomputer software companies cannot afford to maintain a direct sales organization so they must continue to use dealers to represent them.
 - . Multimate has a policy where key dealers and Multimate's National Account representatives make joint calls on prospective customers, and dealers handle the transfer of software and documentation to the customer.
- Ideally, a vendor will have a checklist that contains all aspects of site license, such as copy protection, documentation, etc. Various deals would be negotiated using the various components of that checklist.

4. IMPACT OF SITE LICENSING

- The industry is still grappling with the effects of site licensing programs. The following impacts will result:
 - Site licensing is not going to give vendors of "me too" products much of an edge in selling to the Fortune 1000. The large corporate users would rather buy the more expensive right product than the wrong product at a lower price. They do not want to take chances because when users purchase a site license, they are buying into a product line and so will be very particular about whom they do business with.
 - Site licensing will create opportunities for not only the large main-frame vendors but also for the small microcomputer software

companies who offer quality products. It allows companies to do business without the middleman, making it easier for small companies to succeed.

- . By aggressively promoting site licenses, small companies will put pressure on the larger software companies.
- The window of opportunity for vendors to offer a site license to obtain a competitive edge is beginning to close. Because site licenses are becoming so prevalent, a vendor needs a site licensing policy just to be able to compete on equal terms.

B. VOLUME DISCOUNTS

- When software publishers will not provide site licenses, companies can usually manage to get a volume discount of up to 50% off retail price for the most popular types of business software.
 - But volume discounts do not get around the Fortune 1000's biggest software problem: removing restrictions on the use of that software within the corporation.
- Many of the site license plans in practice today are simply volume purchasing arrangements with deep discounts offered over the retail price in return for a commitment to buy a minimum number of packages over a period of time.
 - Volume purchases differ from site licenses in that in site license users can do the diskette duplication and distribution themselves.
- Retail typically provides a 25% discount, while mail order provides 40-50% off list price.

- Price conscious companies are not willing to pay extra for support that either they do not need or they provide internally.

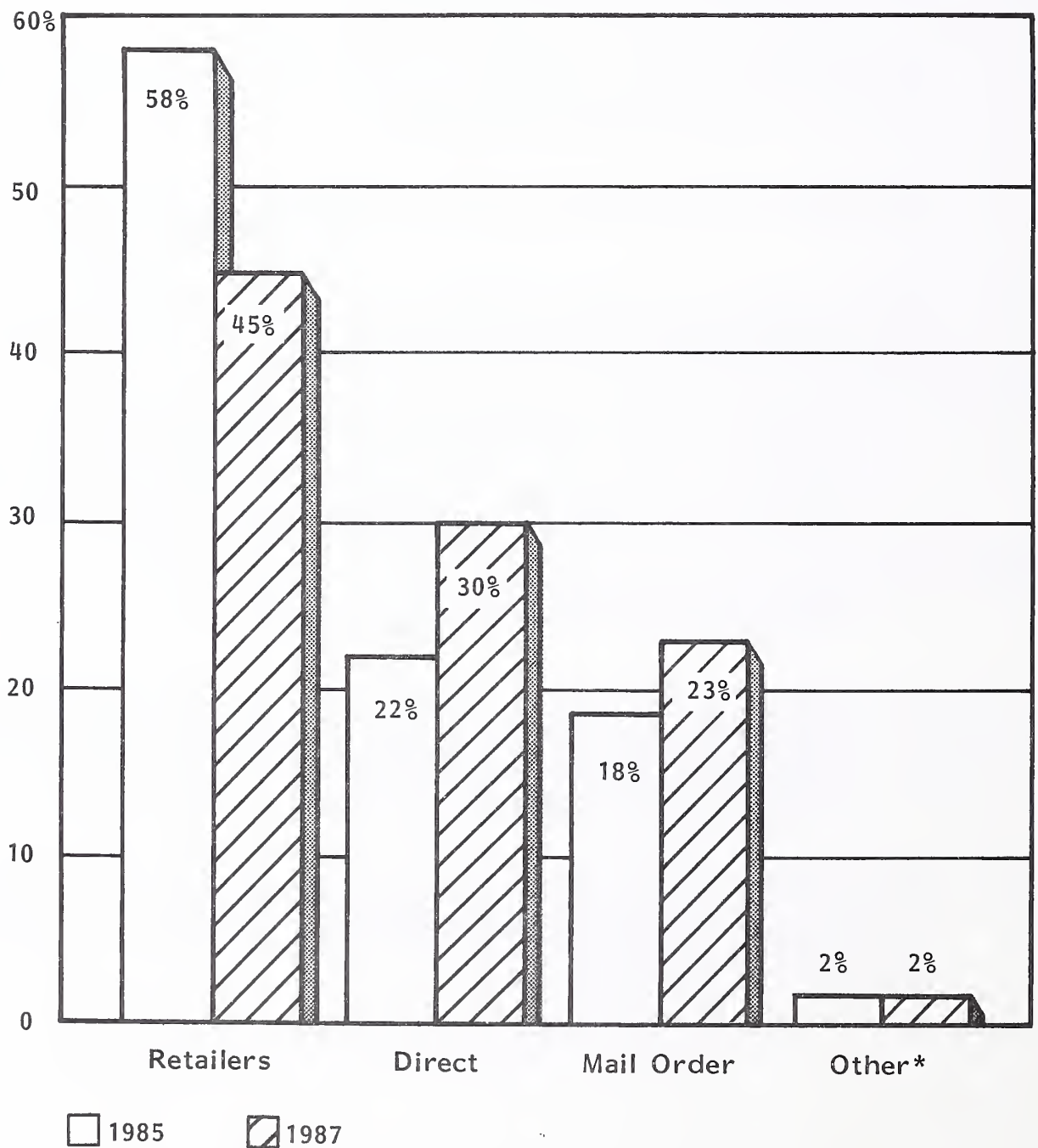
C. DISTRIBUTION CHANNELS

I. PREFERRED DISTRIBUTION CHANNELS

- The distribution channels used both now and in the future, based on IS department interviews, are shown in Exhibit VI-6.
- Distribution channels used by end users are shown in Exhibit VI-7.
- For the near term, retailers have and will continue to maintain the largest share of software distribution to the Fortune 1000.
 - A dealer is often preferred over a company's direct sales force because dealers can deliver more quickly and select a more appropriate mix of software and peripherals for a particular customer or need.
 - Dealers provide convenience and local support.
 - Many large firms buy their software for evaluation purchases from retail outlets, but mail order and direct sales are a growing distribution channel for volume software purchases.
- While retailers will remain the largest source for supplying micro software to major corporations, increasing amounts will be sold through direct sales, mail, phone, and micro-mainframe links.

EXHIBIT VI-6

DISTRIBUTION CHANNELS USED BY THE
U.S. DEPARTMENT TO PURCHASE MICROCOMPUTER SOFTWARE*
(Fortune 1000 Companies)



* Includes VARs, VADs, and OEMs

EXHIBIT VI-7

DISTRIBUTION CHANNELS USED BY END USERS TO PURCHASE MICROCOMPUTER SOFTWARE (Companies > \$100 Million in Revenues)

DISTRIBUTION CHANNEL	NUMBER OF RESPONSES	PERCENT OF TOTAL RESPONSES
Direct from Vendor	56	54%
Retail	54	52
Mail Order	38	37
MIS/DP Department	17	17
VAR/Systems House	11	11
Other	3	3
Total	103	-

- There will be an increase in mail order because large companies will place more importance on price and less on frills. This applies to commodity type packages, such as spreadsheets and word processing packages.
- Many large companies who buy in the \$100,000 per year range will prefer to buy direct from the manufacturer.

2. DIRECT SALES

- Many firms are attempting to reach the Fortune 1000 market through direct sales. Direct selling poses many risks:
 - It is too expensive for most software companies to support a direct sales effort at the current volume levels.
 - Direct selling usually results in channel conflict between retailers and the direct sales force.
 - It takes a tremendous amount of resources to implement a direct sales strategy successfully.
 - It is hard to justify a direct sales force for a low value product. It takes a lot of effort for the payoff to occur.
- However, in some cases, direct sales are all but required.
 - Corporate buyers have been spoiled by traditional mainframe software service and support and demand too much from micro software vendors. However, vendors who can meet this need by providing excellent support and service for their corporate customers will have a significant edge.

- If vendors want to sell their products to corporations, they need to make the effort to establish personal relationships with corporate buyers since each corporate buyer is different.
 - Since there is a lack of dealers who can sell more than just spreadsheets or word processors, many vendors of more sophisticated products are gearing their marketing efforts toward direct sales.
 - But unless the vendor allows the dealer to participate in the direct sale, the dealer will be very upset.
 - It may be far safer, however, for vendors to risk the ire of some dealers by having a direct sales force targeting the Fortune 1000. Vendors must ensure that their programs are sold effectively to their largest potential customers.
- One example of a successful and relatively inexpensive national accounts strategy is as follows:
 - Through telephone conversations and direct mail a vendor creates demand for its software package. But once the interest has been generated, the company calls in a local dealer to close and follow up on the sale. Calling in a dealer reduces sales presentation expenses and helps ensure dealer loyalty.
 - However, for sizeable corporate accounts, a representative from the company will make a personal visit.
 - This is an expensive trip. That is why vendors who sell mini and mainframe products have an edge in this area since they can justify a sales visit in order to sell their other products as well.

- Many corporate microcomputer managers feel that many of the salespeople for microcomputer software are not very sophisticated when it comes to marketing to large corporations. They feel that there is a lack of knowledgeable microcomputer salespeople.
 - One common complaint is lack of product information which hampers their search for new products and impedes support of existing ones.
 - "Most software companies from the largest down have ineffective corporate sales forces," said Alan Gross, President of the Microcomputer Manager's Association of New York.
- Direct sales forces must present a professional quality image to the customer. You need high quality salespeople to do this. Fortune 1000 companies have high expectations of the vendors they do business with.

3. RETAILERS

- Somewhat surprisingly, according to our surveys, retailers continue to be the leading source for software purchases by major corporations.
- Corporate sales forces attached to retail chains are increasing and will play a very significant role in sales to large corporations. These dealers are often referred to as "super dealers."
 - Almost all of the big chains (Sears, Computerland, Businessland, and Inacomp) have set up a national accounts program to sell to the Fortune market.
 - Dealers will need telemarketing or a direct sales force in order to be successful in maintaining their presence in this market.

- Dealers will not and cannot give your product the attention it needs unless it is one of the leading products or is a product from an established vendor.
- Selling through the retail channel requires a hot product, one that practically sells itself. Otherwise, it will never get shelf space.
- Many dealers offer a straight discount to corporate accounts, for example, 25%. Most dealers are unable to compete on the basis of price; rather, they compete on the basis of service. If dealers are allowed to participate in site licensing plans, then they will be able to compete on the basis of price as well.
- Retail stores offer a convenient outlet for individual managers whose spending authority puts software purchases within reach. But more than convenience, these retailers promise local support.
- Some Fortune 1000 companies are sensitive to convenience and service. Many prefer the local service provided by retail outlets.

4. FORTUNE 1000 DISTRIBUTORS

- Facing the realization that large companies do not work like small companies, a new breed of specialized distributor has arisen. There are a few relatively new companies that specialize in selling software directly to large companies. These new corporate software distributors are a valuable source of software products for large corporations. The leading corporate software distributors are profiled in Exhibit VI-8.
- These companies represent a distribution channel that will continue to grow in importance. These corporate distributors provide a level of service and support along with a wide range of applications that few, if any, distribution channels can match.

EXHIBIT VI-8

LEADING CORPORATE SOFTWARE DISTRIBUTORS

DISTRIBUTOR	COMMENTS
CORPORATE SOFTWARE Canton, MA (617) 821-2250	Publishes <u>Corporate Software Guide</u> . Purchased MSA's Micro Distribution Division. Currently the premier firm.
ONE POINT SOFTWARE Walnut Creek, CA (415) 947-0850	Has set up an on-line data base of over 7,000 micro software products: gives clients direct access to it.
MANAGEMENT INFORMATION SOFTWARE, INC. (MIS) New York, NY (212) 686-0800	Emphasis has been on the North- eastern U.S.; is now branching out.
SMARTWARE San Francisco, CA (415) 974-1500	Started in 1979 as minicomputer system house.
PC CONNECTION Marlow, NH (603) 446-3383	Primarily a regular mail order house. Recently established a Corporate Accounts Department.
800-SOFTWARE Berkeley, CA (415) 644-3611	Mail order house that has set up a National Account Program.

- They offer a convenient, single source for all of a corporation's software needs, and their prices are competitive with other channels except for discount mail order. The single source helps the PC Coordinator maintain control over which packages are purchased.
- With the rapid rise and fall of software packages and vendors, simply identifying and selecting appropriate software is a major difficulty for users. The corporate software distributors were formed to help overcome these problems.
- The benefits and disadvantages of these corporate software distributors are compared in Exhibit VI-9.
- The corporate software distributors are usually more willing to distribute products from new publishers than retailers or distributors. Corporations tend to be more open to a new software product, at least trying it if the product addresses a need. It is definitely in the corporate distributors' self-interest to identify products that meet the needs of their clients.

5. IN-HOUSE COMPUTER STORE

- The in-house computer store is a fairly well established distribution channel.
- Staffed by experienced PC users, the in-house computer store invites people to come in and take a look at different types of hardware and software and let them decide which type they want. The store provides training and consultation as well.
- The in-house computer store distributes hardware, software, and training to those that need it.

EXHIBIT VI-9

CORPORATE SOFTWARE DISTRIBUTORS ON BALANCE

BENEFITS	DISADVANTAGES
<ul style="list-style-type: none">● Price Discounts (10 - 45%)● Centralized Purchasing● Evaluation of Products● Technical Support● Rapid Delivery● Wide Selection of Products● Training	<ul style="list-style-type: none">● Discount Not as High as Some Alternatives● Many Customers Unwilling to Pay for Extra Service● Don't Offer Site Licensing

- In-house computer stores, end-user computing departments, and information centers are being controlled by IS departments, making it easier to identify key decisionmakers. These centers can develop into distribution opportunities in large companies.

6. ALTERNATE DISTRIBUTION CHANNELS

a. VARs

- There is very little penetration by value added resellers (VARs) into larger corporations. The VAR channel does not address the corporate market but rather smaller vertical markets. The only value added in selling something like Lotus 1-2-3 is the training, and a retailer can provide that effectively.

b. Mail Order

- This channel has evolved to sell two distinct types of software: popular, mass-marketed titles; and fairly obscure products from specialized publishers who lack the volume to obtain retail distribution.
 - Mail order is becoming more attractive to volume buyers at the expense of retailers. Because of their low overhead, mail order houses can offer software prices from 30-50% below retail. For the volume purchaser, that translates into big savings.

c. Electronic Distribution

- Past attempts at electronic distribution have been focused on retailers or end users. Now, a number of companies are targetting the corporate market. Leading the way is General Electric, which recently introduced QUIK*WARE to distribute micro software electronically. The benefits of QUIK*WARE for users include:

- Rapid distribution of new programs, software updates, and version updates. An example of one application would be if a corporation's central finance department had developed a custom template for Lotus 1-2-3, GE would immediately download the template to anyone within the company who is supposed to have it, even if the person is in a remote office.
 - Makes it easier for micro managers to keep track of billings, how many copies are distributed, and to whom.
 - Simplifies large corporate purchases. Companies can start a master corporate account with GE and allow branch offices around the world to dial-up and shop for applications. A single bill would be sent to headquarters.
- The drawbacks to electronic distribution include:
 - Lack of publisher's support. This is because software publishers are fearful of losing control over their distribution and perhaps aiding software piracy.
 - High cost of sending documentation because of slow data transmission rates, although recent developments with high speed modems (over 10,000 bps) may overcome this limitation.
 - Currently, corporate purchasers express little or no interest in the electronic distribution of software. However, as they become educated to the benefits it provides, it will increase in popularity.
- Electronic distribution's greatest appeal to micro managers is that of a convenient way to dispense program updates to users.

- Business software may be demonstrated through electronic downloading, but for the near future, with one-day shipping so convenient, we will see the programs delivered by mail.
- So, in the meantime, GE will focus on delivering the odds and ends that publishers hate: updates, fixes, and demonstrations of new products.

VII COMPETITIVE ANALYSIS

VII COMPETITIVE ANALYSIS

A. MARKETING STRATEGIES OF VENDORS

I. MAINFRAME SOFTWARE VENDORS

- Independent mainframe and minicomputer software vendors have been fairly successful at selling microcomputer software. Virtually all of them sell directly through national accounts sales forces, usually to the users of their large systems products. A prime example of this is Computer Associates.
 - Computer Associates (CA) acquired two leading micro software firms: Information Unlimited Software and Sorcim/IUS. CA uses its direct sales force to sell the micro software to its mainframe software customers.
 - Sorcim/IUS, owned by CA, derives a number of benefits from the parent company for selling to the Fortune 1000. Computer Associates provide much needed marketing experience for reaching the Fortune 1000.
- For many vendors, entering the PC market was not a matter of choice. Any mainframe company that wants to be a key player in the marketplace has to have a PC strategy.

- Almost all of these vendors have concentrated on building their PC software around the micro-mainframe link, a strategy that will become crucial in the future as more people access the mainframe via a PC.

a. Advantages of Mainframe Vendors

- One competitive edge that mainframe software vendors such as Cullinet and MSA have is that they can reach corporate users with applications via the micro-to-mainframe link.
- Mainframe data base and decision support system (DSS) vendors have been the most active in this area. Virtually all the leaders in this market plan to offer, or currently offer, a micro version of their product with a direct link to the data on their mainframe products.
- Vendors who have a subset of their product on a PC have a built-in market and built-in credibility. The users already feel like they understand the product, and the customer's comfort level is very important in the decisionmaking process.
- When mainframes are involved, the IS department will play an even greater role in software selection. When this is the case, the IS department will look very favorably on the mainframe supplier due to past positive working relationships and a sense of comfort with dealing with established vendors who have been in the industry for many years and are known for quality and support.
- The mainframe and mini suppliers already have the sales and support organization in place. Mainframe software companies have a sales access advantage. The IS departments are accustomed to dealing with the mainframe software salespeople.

b. Disadvantages of Mainframe Vendors

- Selling mainframe software is not the same as selling PC software. Mainframe vendors generally:
 - Do not understand retailing.
 - Do not understand the need for user-friendly interfaces.
 - Do not understand end-user needs.
- It is not always true that the mainframe vendor has an advantage in direct sales because often the micro manager does not have a mainframe data processing background.
- Mainframe salespeople are often not effective sellers of the microcomputer products their company offers, generally because the salesperson often has little financial incentive (e.g., commission) to push the PC product.
 - Mainframe salespeople tend to focus on selling the big ticket mainframe products because it is easier for them to make their quota by selling a few of the high priced products than a great number of the PC products.

2. MICROCOMPUTER SOFTWARE VENDORS

- Most PC software vendors are young companies with little experience selling to corporations.
 - Not many vendors understand the large corporation's operations, but they are learning quickly.

- The sales approaches of the five largest independent microcomputer software companies are profiled below:

a. Lotus

- Lotus Development Corporation initially sold directly to large Fortune 1000 accounts. Later this strategy was modified to include only 200 major corporate customers, with lower volume categories going to retailers. Last year, Lotus, under dealer pressure, terminated its direct sales effort, instead using its direct sales force to help dealers cultivate corporate accounts.
 - The sales staff turns over all orders to their dealers.
 - Lotus directs corporate account sales of its software through its 45 key dealers. Key dealers provide an outside sales force, in-house training facilities, and on-site support capabilities.
 - Lotus will provide educational seminars, maintenance, and other services to the national accounts.

b. Microsoft

- Microsoft has a key dealer program. They also have an internal sales force to sell to Fortune 1000 accounts. Dealers selling to Fortune 1000 accounts will receive a discount in addition to the company's standard dealer discount. Microsoft provides evaluation software on a 60-day trial basis to prospective users.

c. Ashton-Tate

- Ashton-Tate launched a corporate sales program in April called the Corporate Emphasis Program. Under the program, customers that have a dedicated support person and 25 or more copies of Ashton-Tate software will receive a special service, support, and training package.

- Ashton-Tate sells to corporations through dealers only, with no plans to sell to end users directly. They recently conducted a six-city dealer/corporate end user seminar series as part of a strong push to move their products into the Fortune 1000 market, both through dealers and through the development of vertical market applications or templates for use with Framework. The series discussed issues of concern to corporate customers.
- Ashton-Tate is providing more support to their dealers to help them sell to the Fortune 1000. Training support includes training specialists, materials, and classes from Ashton-Tate at its district sales offices or through an authorized dealer or third-party trainer.

d. Digital Research (DRI)

- DRI has no corporate sales force. They leave the corporate calls to their dealers. DRI will send a technical or sales support person to assist a dealer on a call, but unlike Lotus, DRI does not have someone generating sales leads in the Fortune 1000 market and then turning over leads to key dealers. DRI decided not to follow that plan because they felt it is difficult to send in a good, aggressive salesperson and tell them not to close the sale.

e. Micropro

- Micropro sells through dealers and distributors only. They have a corporate sales program that is offered to dealers who have an outside sales force and sell to the Fortune 1000. They offer a site license through this program.
- They have a cooperative sales effort between their sales force and their dealers. Dealers are participants in the direct selling effort and dealers share in the financial rewards. If Micropro makes a successful sales call, the corporation chooses a local dealer from which to buy the product.

3. HARDWARE VENDORS

- Hardware manufacturers can often supply third-party software. IBM offers "one-stop" shopping for corporations that buy PCs directly from IBM's National Accounts Division by reselling other vendors' software as well as IBM's products.
- IBM's direct sales force is a potent force in the Fortune 1000 marketplace. They have increased sales of IBM PCs in this market and have been very aggressive in selling software with the hardware.
 - Their sales force commands a great deal of attention in the IS departments of the major corporations.
 - They are known, however, to concentrate on high-end sales and do not seek and give the micro manager the attention that may be necessary.
 - In 1984, IBM started selling its Personal Decision Series and Business Management Series to go with its Assistant Series of software packages. With these products, IBM has become a major force in selling software to large accounts. Before, they were content to resell or recommend other vendors' software when they make a hardware sale. Now they are planning on claiming the software action for themselves.

B. JOINT MARKETING AGREEMENTS

- Joint marketing agreements, partnerships, and mergers and acquisitions are all occurring with greater frequency. Underlying all of these efforts is a desire on the part of vendors to better penetrate the Fortune 1000 market. To accomplish this, vendors realize that they need to work together to provide a complete solution to their customers' needs.

- Information services vendors cannot be all things to all people. They have to team up to offer the missing products, services, or distribution channels that they need to compete.
- Mergers and acquisitions, in addition to creating a larger revenue base, are a means of providing single source service to the Fortune 1000 IS departments.
- Windows of opportunity are closing for developing products internally. In order to sell new products, vendors need to seek acquisitions and buy marketing rights from other developers.

● Suggestions for forming strategic relationships include:

- Establish joint relationships with mini and mainframe DBMS vendors.
 - Recent alliances such as the Lotus/Cullinet agreement are examples of how micro software vendors can penetrate accounts that are the toughest to penetrate--big mainframe sites that buy software in bulk.
- The benefits of teaming with a mainframe software vendor include:
 - Access to established customer base.
 - Direct sales force.
 - Micro-mainframe link.
- Get a programmer who works within a user company to develop an application for that company, but allow him to retain rights to it and joint-market the program.

- . This approach would have to be well thought out, because it is fraught with problems.
- Remote computing service vendors are looking for opportunities to market PC software products so they can supply the complete computing needs of their customers. The computer service companies are natural candidates for strategic partnerships since they already have a national sales force.
- Join with companies that have an established reputation for selling to the Fortune 1000, such as accounting firms and other professional services firms.
- OEM agreements can be successful. Although it can take a long time to establish an OEM agreement, once it starts, it can do very well.

C. WHO THE WINNERS WILL BE

- The types of vendors that will succeed in the Fortune 1000 are listed in Exhibit VII-1.
- Winners in this market will:
 - Be the companies with multiple products and multiple distribution strategies to go along with reliable, high quality products.
 - Understand the differences between consumer segments and corporate segments, and will have different strategies for each.

EXHIBIT VII-1

WINNERS IN THE FORTUNE 1000 MARKET

- IBM (Reselling third party packages)
- Large established micro software vendors
- Smaller vendors with a niche
- Mainframe software vendors with micro software products that are successful on their own (i.e. users demand product without prodding from IS department).
- Vendors that understand and fulfill Fortune 1000 needs

- Have a strategy for adapting to the growing influence of IS departments in micro software acquisition.
- Keep in mind, moreover, that successful vendors are teaming up with each other, making it even tougher to compete against them.

VIII RECOMMENDED SELLING STRATEGIES

VIII RECOMMENDED SELLING STRATEGIES

- Recommendations for selling to the Fortune 1000 are summarized in Exhibit VIII-1.
- Recommendations for selling to the Fortune 1000 include:
 - Sell to IS Departments and End Users. Selecting, evaluating, and purchasing personal computer software is indeed a joint effort at most large corporations. Not surprisingly, the IS department plays a significant role in making volume purchases. Consequently, it is advisable to:
 - Target the IS department. They are influential, not only as direct buyers, but as information resources for other company buyers. Targeting them necessitates direct sales programs as well as advertising campaigns.
 - Think of the microcomputer manager in different terms than the average user. While these managers may not use the product themselves, they are responsible for its use by hundreds of people within their organization.
 - Advertise in places that reach corporate purchase decision-makers, such as PC Week and Computerworld.

EXHIBIT VIII-1

RECOMMENDATIONS

- Sell to IS departments and end users
- Sell complete solutions
- Provide premium hotline support to micromanagers
- Establish and maintain relationships with customer
- Understand internal purchasing process
- Offer easy-to-customize products

EXHIBIT VIII-1 (Cont.)

RECOMMENDATIONS

- Maintain multiple sales fronts
- Establish direct sales force
- Focus on key dealers
- Use corporate software distributors
- Leverage current customer base
- Provide site licensing plans

EXHIBIT VIII-1 (Cont.)

RECOMMENDATIONS

- Align with strategic partners
- Ignore industry standards at your own peril
- Piggyback on successes and find new niches
- Provide one-stop shopping

- Sell Complete Solutions. A micro software vendor can get a significant edge by offering a total program designed to fulfill a corporation's microcomputer needs from beginning to end.
- Provide Premium Hotline Support to Micro Manager. This requires timely, effective post-sales support. Micro managers support hundreds of users in their corporation; consequently, they insist on preferential hotline support from their vendor.
- Establish and Maintain a Relationship with the Customer. Increasingly, large buyers want to establish relationships with their suppliers. Vendors should provide more information to these corporate buyers, including documentation changes, product updates, bugs that may have been found in the product, and new product information. One problem is that many vendors do not respond to their corporate clients as corporations, but as individual users. Viewed in this light, vendors treat them as a one-time buyer rather than as a company trying to develop an ongoing relationship.
- Understand Internal Purchasing Process. Vendors need to respond to the buying criteria of the Fortune 1000. There is often a difference between who initiates, who influences, and who authorizes the purchase. While there is a trend toward the centralization of software purchases, it is nowhere near as well enforced as the hardware standards. Consequently, it is still a viable strategy to sell to department heads and end users, depending on the product.
- Offer Easy-to-Customize Products. Develop easy-to-customize products. The Fortune 1000 has some unique product needs and the in-house computer talent to write custom applications. Although source code availability is rated the lowest of the buying criteria, some companies will want the ability to buy the source code so that the user can write a custom version of the program. They may want to implement functions that are unique to the company.

- Maintain Multiple Sales Fronts. For vendors not concerned with channel conflict, the best strategy is to make your product available through all channels in order to give the customers options as to where to buy the product. This makes it easy for the corporate client to do business with the vendor. For example, many clients do not want support; they want convenience.
- Establish a Direct Sales Force. A direct sales force ensures that a product is reaching the largest potential buyers. In addition, many buyers expect to receive the attention of a direct sales force.
- Focus on Key Dealers. Sell through dealers that are qualified to sell to the Fortune marketplace.
- Use Corporate Software Distributors. These distributors are proving to be a very attractive way of penetrating the Fortune 1000.
- Leverage Current Customer Base. Take good care of current customers. Their influence on potential new customers is enormous.
- Provide Site Licensing Plans. Although only a few very vocal large companies are demanding site licenses now, their demands will only increase in the future.
- Align Yourself with Strategic Partners. It is difficult for one vendor to provide for the entire range of needs for a customer. Therefore, most smaller vendors will need to team up with other vendors to provide the missing pieces.
- Ignore Industry Standards at Your Own Peril. There is currently a large installed base of PCs, a great range and number of software packages, and a very sizeable investment in training for the current products. Vendors must adapt to this environment.

- Piggyback on Successes and Find New Niches. Find niches that extend the capabilities of existing products and build on other peoples' pioneering efforts, such as Lotus 1-2-3.

- Provide One-Stop Shopping. Provide a multitude of solutions to a multitude of problems. From a customer's point of view, its easier to deal with one company rather than ten. Many customers would like one company to take care of all their needs because large deals generate the level of support and services that they require. In many cases, the large corporation is looking for a single source who can provide installation, training, and post-sale maintenance.
 - . Many large companies want to deal with one source, with a company they are familiar with, and one they know is going to be around.

- Make it as Easy as Possible for Corporate Buyers to Get Information and Evaluate Your Product. Seek out the PC Coordinators in the Fortune 1000 corporations and provide them with a free evaluation copy of the program.
 - . This is essential because the vast majority of purchasers insist on trying out a product, often for a seemingly endless length of time, before they decide to buy in quantity. Providing evaluation copies has advantages to both parties: the PC Coordinator can evaluate new products without spending any money and the vendor can generate a large number of new sales if the PC Coordinator likes the product.

 - . If the vendor is worried about piracy, then at the very least they should send the documentation to the buyer.

- . When a vendor does send an evaluation copy, they should send it for more than 30 days because 30 days is really not long enough for these companies to evaluate the package against other packages. Users are asking for 60 days to evaluate a product.
- . One problem, however, is that many PC Coordinators are swamped with programs to try. What must be done in this case is to make the package as easy to demonstrate or evaluate as possible.
 - This can be done by providing telephone or on-site support to the person.
 - An innovative and inexpensive approach to this is to offer a short audio cassette to go along with the evaluation copy that guides the user through the package. This has several benefits: it gets people's interest, it is easy to use, and it allows people to avoid looking at the manual.
- Winning a prestigious corporate client can greatly increase a company's visibility in the marketplace, so it definitely pays to focus on the Fortune 1000. But it is harder to sell to one of the major accounts than most salespeople realize.
- Multimillion dollar advertising campaigns will not be needed to penetrate this sector.
- Sell your company to the customer. That is, convince the customer that your company is the one with which they should do business by demonstrating the long-term viability, professionalism, and responsiveness to client needs your company possesses.

- Remove copy protection schemes that do not allow for installation on a hard disk. Corporations have greatly increased their use of hard disks. Current copy protection schemes that require a "key disk" are not acceptable to people who use hard disks.

IX CONCLUSIONS

IX CONCLUSIONS

- The advantages and disadvantages of selling to the Fortune 1000 are shown in Exhibit IX-1.
- A list of conclusions is shown in Exhibit IX-2. These conclusions are:
 - Customers Want to Know Upgrade Plans of Vendors. Customers want to know about vendor plans for micro-mainframe links and multi-user versions. They want to preserve their investment in the products they have purchased by extending the product life cycles; consequently, many customers want to work with vendors and participate in future product development.
 - PC Vendors Need a Mainframe and Minicomputer Strategy. As data processing managers control more of the microcomputer purchases, links with mainframes and minis will become more important. All of the Fortune 1000 companies have invested millions of dollars in mainframe and minicomputer systems. Vendors will need strategies to survive in this environment. This implies more partnering will go on as PC vendors team up with mainframe vendors.
 - Network Versions and Micro-Mainframe Links Are Not Critical Yet. Although currently not highly rated selection factors, these will increase in the future as more affordable and workable solutions become available.

EXHIBIT IX-1

SELLING TO THE FORTUNE 1000 ON BALANCE

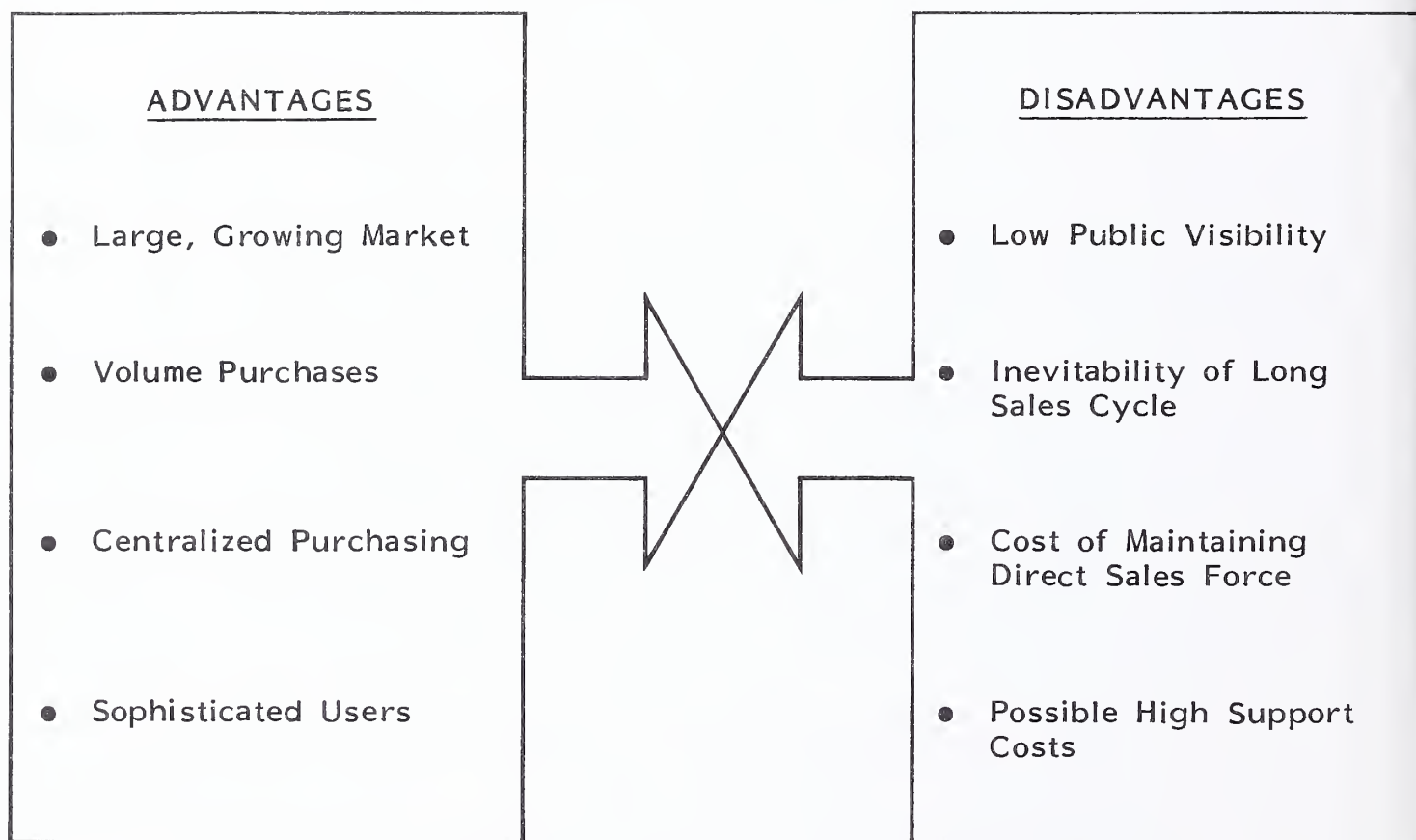


EXHIBIT IX-2

CONCLUSIONS

- Customers want to know upgrade plans of vendors
- PC software vendors need a mainframe and minicomputer strategy
- Network versions and micro-mainframe links not critical yet
- Customers price sensitive when acquiring software, not when selecting software
- Performance and features still most important

CONCLUSIONS

- Site licensing will create short-term opportunities
- Best site licensing approach depends on competitive position of vendor
- Consolidation of software vendors will impact Fortune 1000 market
- Customers are looking longer term
- Purchase decision cycles becoming longer
- Important to understand "super-users"

- Customers Price Sensitive When Acquiring Software, Not When Selecting Software. While price may not be a major factor in selecting a product, it is a key factor in volume procurements of products.
- Performance and Features Still Most Important. Micro managers who were surveyed indicated that IBM compatibility, performance, and features were the most important selection criteria. Consequently, there will always be room for a few new entrants with innovative, productivity-increasing products.
- Site Licensing Will Create Short-Term Opportunities. The move to licensing reflects the centralization of the software buying process in large corporations. Buying used to be diffused. Now that it is centralized, more volume purchases can be made.
 - Smaller companies having trouble getting shelf space will go to direct sales or offer site licensing in order to compete.
 - These smaller vendors will be able to get the attention of the micro managers by offering site licenses; however, the mere offering of a site license will not be enough to garner a sale.
- Best Site Licensing Approach Depends on Competitive Position of Vendor. Vendors who have already established retail distribution outlets will need to work with their dealers in providing site licenses, but new entrants will be able to bypass dealers and sell directly.
 - Going through dealers has the advantage of being able to leverage the dealer's outside sales forces.
 - Bypassing dealers allows vendors to maintain higher margins.

- Vendors desperate for sales will be more inclined to provide for unlimited copying of their program, whereas the leading vendors will never allow unlimited copying of their software.
- Consolidation of Software Vendors Will Impact Fortune 1000 Market.
The consolidation will lead to:
 - Greater standardization of products.
 - Better relationships between vendors and customers because the remaining vendors will be of sufficient size to provide plenty of contact with their customers. Stronger vendors can provide better service.
 - Strengthening of the remaining vendors. It will be more difficult to compete against these larger vendors because along with providing more complete service, they will be able to share marketing and sales costs for a wider product line.
- Customers Are Looking Longer Term. Rather than provide a one-shot program, vendors need to provide for a number of solutions to a number of problems.
 - As corporations invest in more software, the product life cycles will increase because the corporation is not going to invest hundreds of thousands of dollars in programs and time and then turn around and throw out all of the work that went into training the building data bases and models. As a result, corporations are going to demand that the vendors of products they purchase provide enhancements and upgrades to their product to increase its life.

- Purchase Decision Cycles Becoming Longer. This is due to:
 - . Profusion of site license terms confuses the customer.
 - . Committee decisonmaking is widespread.
 - . Volume purchases are evaluated more extensively.
- Important to Understand "Superusers." "Superusers" both influence and make purchasing decisons in large companies. They are the ones who usually try out new products first.

APPENDIX A: VENDOR QUESTIONNAIRE

APPENDIX A
VENDOR QUESTIONNAIRE

1. INTRODUCTION

A. Do you sell personal computer software to the Fortune 1000?

B. What percentage of your company's revenue goes to each market?

_____ Small (< \$10 Million)
_____ Medium (\$10 Million < X < \$300 Million)
_____ Fortune 1000 (> \$300 Million)

2. DISTRIBUTION

A. Which distribution channels do you currently use? And which do you plan on using in the next two years?

	<u>1984</u>	<u>1986-1987</u>
OEM	_____	_____
Direct	_____	_____
Retail	_____	_____
- Direct	_____	_____
- Distributor	_____	_____
Mail Order	_____	_____
Other	_____	_____

B. What channels would you like to exploit that you currently do not?

- C. Which of these channels are most successful in reaching the Fortune 1000?
Why?

- D. If you were to sell direct, how would you keep your dealers and distributors happy?

- E. Do you target end users, departments, or IS department managers?
Why? Will this change?

3. MARKETING STRATEGIES

A. Which of the following factors are important for the Fortune 1000 purchasers? (Rate on a scale of 1-10, with 10 being the highest)

- _____ Price
- _____ Vendor reputation
- _____ Customer support (by vendor)
- _____ Customer support (by dealer/distributor)
- _____ Software performance
- _____ Software features
- _____ Ease of use
- _____ Micro-mainframe links
- _____ Multi-user versions
- _____ Ease of training
- _____ Interfaces to other software
- _____ Documentation
- _____ Security features
- _____ IBM compatibility
- _____ Source code availability
- _____ Vendor's financial stability
- _____ Lack of copy protection

B. What are the biggest impediments to selling to the Fortune 1000?

C. What steps is your company taking to increase sales to the Fortune 1000?

- D. What will personal computer vendors have to do to be successful at selling software to the Fortune 1000?

- E. What future needs do you think Fortune 1000 customers will have?

4. SUPPORT AND TRAINING

- A. Do you currently offer special support and training to Fortune 1000 customers?

- B. Do you plan to in the future?

- C. Which post sale support services do you offer to your Fortune 1000 customers?

_____ Centralized support

_____ Free training

_____ Purchased training

_____ Customization

_____ Software fixes

_____ Consulting

_____ Upgrades

5. PRICING

A. At what volume levels do you offer discounts to Fortune 1000 companies?

<u>Volume</u>	<u>Percent Discount</u>
_____	_____
_____	_____
_____	_____

B. Do you currently offer site licensing arrangements? Do you plan to?

C. If not, why not? If yes, how is it structured?

D. On a scale of 1-10, how important to your Fortune 1000 customers is the availability of site licensing?

6. PARTNERSHIPS AND JOINT VENTURES

A. Do you see companies entering into joint marketing agreements in order to penetrate Fortune 1000 accounts?

B. Is your company currently involved with any joint marketing arrangements for reaching the Fortune 1000?

- C. Do you plan to?
(For example, mainframe software vendors, hardware companies, computer service companies)

With whom?

What are the details?

How successful have they been? Why?

Thank You!

APPENDIX B: USER QUESTIONNAIRE

APPENDIX B

USER QUESTIONNAIRE

DECISION-MAKING CRITERIA

1. On a scale of 1-10 (1 = least influence, 10 = most influence) how much influence in purchasing software do the following groups have in the purchase decision?

_____ MIS/DP
_____ User departments
_____ Top corporate management
_____ Administration
_____ Finance department
_____ Other (please specify) _____

2. How much involvement, on a scale of 1-10, does the MIS/DP department have in the following aspects of purchasing personal computer software in your organization?

_____ Advises user department of purchase
_____ Plans use and applications with user departments
_____ Buys personal computer software for user departments as needed
_____ Sets standards for purchases by user department
_____ Test and evaluation
_____ Establishes an approved vendor list
_____ Other (please specify) _____

3. Please rate each of the following factors in their importance to your company in choosing microcomputer software. (Scale of 1-10, with 10 being the highest)

_____ Price
_____ Vendor reputation
_____ Customer support (by vendor)
_____ Customer support (by dealer/distributor)
_____ Software performance
_____ Software features
_____ Ease of use
_____ Ease of training
_____ Micro-mainframe links
_____ Interfaces to other software
_____ Documentation
_____ Security features
_____ IBM compatibility
_____ Source code availability
_____ Vendor's financial stability
_____ Lack of copy protection

NEW PRODUCT NEEDS

4. What features missing in today's end-user software packages will be required in the future?

5. What improvements in microcomputer software would you like to see?

6. What types of products would you like to have that are currently not available?

List the top three:

1. _____
2. _____
3. _____

For example:

Shared file multi-user version of Lotus 1-2-3.

DISTRIBUTION CHANNELS USED

7. What percentage of your company's software purchases are made through the following channels:

<u>Now</u>		<u>Future</u>	<u>Preference</u>
_____	Retail	_____	_____
_____	Mail Order	_____	_____
_____	Direct	_____	_____
_____	VAR	_____	_____
_____	OEM	_____	_____
_____	Other	_____	_____

TRAINING AND SUPPORT

8. How would you rate the value of the following post sales support services offered by vendors, on a scale of 1-10?

_____ Centralized support

_____ Free training

_____ Purchased training

_____ Customization

_____ Software fixes

_____ Consulting

_____ Upgrades

9. What improvements in training and support from vendors would you like to see?

10. Do you see the need for training and support provided by vendors increasing or decreasing? Why?

PRICING REQUIREMENTS

11. What kind of volume discounts are you getting? Through which channels and what are the terms?

<u>Channel</u>	<u>Volume</u>	<u>Percent Discount</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

12. On a scale of 1-10, how important is the availability of site licensing when you select a package?

13. Which aspects of site licensing do you consider the most important, on a scale of 1-10?

_____ Price discount

_____ Lack of copy protection

_____ Other (please specify) _____

14. Are there any types of pricing approaches by vendors which you have not seen, but which you wish were available?

_____ Yes

_____ No

15. If yes, what type of pricing approaches would like to see?

Thank You!

APPENDIX C: RELATED INPUT REPORTS

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- Analysis of Corporate User Needs.
- Decision Support Systems and Beyond.
- Micro-Mainframe: Personal Computer Market Opportunities.
- New Generation of Integrated Software.
- Pricing and Distribution of Personal Computer Software.

